Supplementary Materials

Table S1. Treatment recommendations for each HCV genotype, according to the most recent guidelines [15]. All approved interferon-containing and interferon-free regimens are listed in the table, with the respective HCV genotype in which they can be administered. For the same treatment regimen, the duration of therapy and whether or not ribavirin (RBV) needs to be added to the regimen, can still differ between different genotypes.

	Regimen	**Genotype**
IFN-free	Sofosbuvir + RBV	2 + 3
	Sofosbuvir/Ledipasvir (+ RBV)	1 + 4 + 5 + 6
	Ombitasvir/Paritaprevir/Ritonavir + Dasabuvir (+ RBV)	1
	Sofosbuvir + Simeprevir (+ RBV)	1 + 4
	Sofosbuvir + Daclatasvir (+ RBV)	All
	Ombitasvir/Paritaprevir/r (+ RBV)	4
IFN-containing	PegIFN-α + RBV + Sofosbuvir	All
	PegIFN-α + RBV + Simeprevir	1 + 4

Table S2. Within-genotype nucleotide diversity estimates (%) for all six HCV genotypes. Nucleotide diversity is given for each of the genetic regions encoding the ten viral proteins separately, and also for the full genome (excluding UTR). IQR or interquartile range gives a set of values between the 25th percentile (Q1) and the 75th percentile (Q3).

%	**Core Genetic Region**	**E1 Genetic Region**	**E2 Genetic Region**	**p7 Genetic Region**	**NS2 Genetic Region**	**NS3 Genetic Region**	**NS4A Genetic Region**	**NS4B Genetic Region**	**NS5A Genetic Region**	**NS5B Genetic Region**	**Full-Genome (Excluding UTR)**
HCV1	6.34	17.23	21.51	17.3	18.95	14.16	10.97	14.7	17.56	12	13.53
HCV2	8.63	18.63	18.76	18.55	18.38	14.45	15.76	13.36	17.19	11.65	14.51
HCV3	8.81	16.5	19.35	17.14	16.43	13.99	13.34	14.45	16.55	11.78	14.59
HCV4	9.11	23.79	25.75	26.71	28.32	19.17	20.25	19.57	24.02	16.74	20
HCV5	7.99	17.4	17.45	16.8	17.96	12.35	12.89	14.7	15.17	12.04	13.97
HCV6	12.63	28.93	26.52	34.49	27.91	21.38	22.98	22.87	27.51	20.35	23.37
Median	**8.72**	**18.02**	**20.43**	**17.93**	**18.67**	**14.31**	**14.55**	**14.7**	**17.38**	**12.02**	**14.55**
IQR (Q1-Q3)	**8.15–9.04**	**17.27–22.50**	**18.91–24.69**	**17.18–24.67**	**18.07–25.67**	**1.03–17.99**	**13.00–19.13**	**14.51–18.35**	**16.71–22.41**	**11.84–15.57**	**14.11–18.65**

Table S3. Within-genotype amino acid diversity estimates (%) for all six HCV genotypes. Amino acid diversity is given for each of the ten proteins separately, and also for the overall polyprotein. IQR or interquartile range gives a set of values between the 25th percentile (Q1) and the 75th percentile (Q3).

%	**Core**	**E1**	**E2**	**p7**	**NS2**	**NS3**	**NS4A**	**NS4B**	**NS5A**	**NS5B**	**Full-Genome Polyprotein**
HCV1	2	15	19.01	14.19	15.85	5.31	7	7.04	14.42	7.5	8.71
HCV2	4.52	17.17	13.87	15.47	15.42	5.66	10.21	4.61	14.78	8.18	9.6
HCV3	4.2	13.98	17.45	14.18	10.92	6	5.08	6.97	12.06	7.63	9.48
HCV4	3	17.66	19.85	23.36	24.11	6.75	11.26	7.29	17.56	10.58	12.17
HCV5	5.82	14.16	13.95	18.03	15.58	5.46	6.84	9.2	12.46	7.98	9.82
HCV6	5.33	25.45	20.91	33.94	21.22	8.78	13.54	13.02	21.57	13.48	15.67
Median	**4.36**	**16.09**	**18.23**	**16.75**	**15.72**	**5.83**	**8.61**	**7.17**	**14.60**	**8.08**	**9.71**
IQR (Q1-Q3)	**2.13–3.3**	**14.37–17.54**	**14.83–19.64**	**14.51–22.03**	**15.46–19.88**	**5.51–6.56**	**6.88–11.00**	**6.99–8.72**	**12.95–16.87**	**7.72–9.98**	**9.51–11.58**

Table S4. HCV inter-genotype genomic diversity (%). Inter-genotype pairwise nucleotide diversity (upper triangle) and amino acid diversity (bottom triangle) at the genome level.

		NUCLEOTIDE DIVERSITY (%)					
		HCV1	**HCV2**	**HCV3**	**HCV4**	**HCV5**	**HCV6**
AMINO ACID DIVERSITY (%)	**HCV1**	-	33.66	32.28	29.03	30.85	31.29
	HCV2	28.42	-	35.46	33.77	34.36	34.5
	HCV3	25.02	29.87	-	32.39	32.79	32.92
	HCV4	21.06	28.36	24.98	-	31.09	31.18
	HCV5	23.42	29.62	26.25	24.12	-	31.93
	HCV6	23.77	28.87	25.57	25.57	24.63	-

Table S5. Nucleotide alignment of the H77 (NC_004102) reference sequence with the consensus of all six HCV genotypes. For each genotype, a consensus alignment was obtained, based on the most frequently occurring nucleotides in the respective datasets. Consensus nucleotides indicated in bold, highlight positions that display a different consensus nucleotide compared to reference sequence H77.

	1 10 20 30 40 50 60 70 79
H77 (NC_004102)	ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGTCGCCCACAGGACGTCAAGTTCCCGGGTG
HCV1	ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCGTCGCCCACAGGACGTCAAGTTCCCGGGTG
HCV2	ATGAGCAC**A**AATCCTAAACCTCAAAGAAAAACCAAA**AGA**AACAC**A**AACCG**C**CGCCCACAGGACGTCAAGTTCCCGGGTG
HCV3	ATGAGCAC**ACT**TCCTAAACCTCAAAGAAAAACCAAA**AGA**AACACCA**T**CCGTCGCCCACAGGACGTCAAGTTCCCGGGTG
HCV4	ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAACGTAACACCAACCG**C**CGCCC**CAT**GGACGT**T**AAGTTCCCGGGTG
HCV5	ATGAGCACGAATCCTAAACCTCAAAGAAAAACCAAA**AGA**AACACCAACCG**C**CGCCCACAGGACGTCAAGTTCCCGGG**C**G
HCV6	ATGAGCAC**ACT**TCC**A**AAACC**C**CAAAGAAAAACCAAA**AGA**AACACCAACCGTCGCCCA**AT**GGACGTCAAGTTCCCGGGTG
	80 90 100 110 120 130 140 150 158
H77 (NC_004102)	GCGGTCAGATCGTTGGTGGAGTTTACTTGTTGCCGCGCAGGGGCCCTAGATTGGGTGTGCGCGCGACGAGGAAGACTTC
HCV1	GCGGTCAGATCGTTGGTGGAGTTTACTTGTTGCCGCGCAGGGGCCCTAGATTGGGTGTGCGCGCGACGAGGAAGACTTC
HCV2	GCGG**C**CAGATCGTTGG**C**GGAGTTTACTTG**C**TGCCGCGCAGGGGCCC**C**AG**G**TTGGGTGTGCGCGCGAC**A**AGGAAGACTTC
HCV3	GCGG**A**CAGATCGTTGGTGGAGT**A**TAC**G**TGTTGCCGCGCAGGGGCCC**AC**GATTGGGTGTGCGCGCGACG**C**G**T**AA**A**ACTTC
HCV4	G**T**GG**C**CAGATCGTTGG**C**GGAGTTTACTTGTTGCCGCGCAGGGGCCC**C**AG**G**TTGGGTGTGCGCGCGAC**TC**GGAAGACTTC
HCV5	G**T**GGTCAGATCGTTGGTGGAGTTTACTTGTTGCCGCGCAGGGGCCCTAG**G**TTGGGTGTGCGCGCGAC**TC**GGAAGACTTC
HCV6	GCGGTCAGATCGTTGGTGGAGTTTACTTGTTGCCGCGCAGGGGCCC**CC**GATTGGGTGTGCGCGCGACGAGGAAGACTTC

Table S5. *Cont.*

	159 170 180 190 200 210 220 230 237
H77 (NC_004102)	CGAGCGGTCGCAACCTCGAGGTAGACGTCAGCCTATCCCCAAGGCACGTCGGCCCGAGGGCAGGACCTGGGCTCAGCCC
HCV1	CGAGCGGTCGCAACCTCGAGGTAGACGTCAGCCTATCCCCAAGGC**T**CGTCGGCCCGAGGGCAGGACCTGGGCTCAGCCC
HCV2	CGAGCG**A**TC**C**CA**G**CC**G**CG**T**GG**G**AGACG**C**CAGCC**C**ATCCC**G**AA**A**G**AT**CG**G**CG**CT**CC**ACC**GGCA**A**G**T**CCTGGG**GAA**AGCC**A**
HCV3	**T**GA**A**CGGTC**A**CA**G**CCTCG**C**GG**AC**G**G**CG**A**CAGCCTATCCCCAAGGC**G**CGTCGG**AG**CGA**A**GGC**C**GG**T**CCTGGGCTCAGCCC
HCV4	**G**GAGCGGTCGCAACCTCG**T**GG**G**AG**G**CG**C**CA**A**CCTATCCCCAAGGC**G**CG**C**CG**A**CCCGAGGGCAGG**T**CCTGGGCTCAGCCC
HCV5	**A**GA**A**CGGTCGCAACC**C**CG**T**GG**AC**G**G**CG**C**CAGCCTAT**T**CCCAAGGC**G**CG**C**C**AA**CCC**AC**GGGC**C**GG**T**CCTGGG**G**TCA**A**CCC
HCV6	CGA**A**CG**A**TC**C**CA**G**CCC**A**GAGG**C**AG**G**CG**C**CAGCCTAT**A**CC**A**AAGGC**G**CG**C**C**A**GCCC**AC**GGGC**C**GG**CA**CTGGGCTCAGCCC
	238 250 260 270 280 290 300 310 316
H77 (NC_004102)	GGGTACCCTTGGCCCCTCTATGGCAATGAGGGTTGCGGGTGGGCGGGATGGCTCCTGTCTCCCCGTGGCTCTCGGCCTA
HCV1	GGGTACCCTTGGCCCCTCTATGGCAATGAGGG**C**TGCGGGTGGGCGGGATGGCTCCTGTCTCCCCGTGGCTCTCGGCCTA
HCV2	GG**A**TA**T**CCTTGGCCCCT**G**TA**C**GG**A**AA**C**GAGGG**C**TGCGG**C**TGGGC**A**GG**T**TGGCTCCTGTC**C**CCCCG**C**GG**G**TCTCG**T**CCTA
HCV3	GGGTACCCTTGGCCCCTCTATGG**T**AA**C**GAGGG**C**TGCGGGTGGGC**A**GG**G**TGGCTCCTGTC**C**CC**A**CG**C**GGCTC**C**CG**T**CC**AT**
HCV4	GGGTACCCTTGGCC**T**CT**T**TA**C**GGCAATGAGGG**C**TGCGGGTGGGC**A**GGATGGCTCCTGTC**A**CCCCG**C**GGCTCTCGGCC**GT**
HCV5	GGGTACCCTTGGCCCCT**T**TA**C**G**C**CAATGAGGG**CCT**CGGGTGGGC**A**GG**G**TGG**T**T**G**CT**C**TC**C**CCCCG**A**GGCTCTCGGCCTA
HCV6	GG**T**TACCCTTGGCCCCT**T**TATGG**A**AA**C**GAGGG**C**TGCGGGTGGGC**A**GG**G**TGGCTCCTGTC**C**CCCCG**C**GGCTC**C**CG**C**CC**A**A
	317 330 340 350 360 370 380 390 395
H77 (NC_004102)	GCTGGGGCCCCACAGACCCCCGGCGTAGGTCGCGCAATTTGGGTAAGGTCATCGATACCCTTACGTGCGGCTTCGCCGA
HCV1	G**T**TGGGGCCCCACAGACCCCCGGCGTAGGTCGCGCAATTTGGGTAAGGTCATCGATACCCT**C**ACGTGCGGCTTCGCCGA
HCV2	**CT**TGGGGCCCCAC**T**GACCCCCGGC**A**TAG**A**TC**A**CGCAATTTGGGTAAGGTCATCGATACC**A**TTACGTG**T**GG**T**TT**T**GCCGA
HCV3	**CT**TGGGGCCC**A**A**AT**GACCCCCGGCG**A**AGGTC**C**CGCAATTTGGGTAA**A**GTCATCGATACCCT**C**ACGTGCGG**A**TTCGCCGA
HCV4	**CT**TGGGGCCC**A**A**AT**GA**T**CCCCGGCG**G**AGGTCGCGCAATTTGGGTAAGGTCATCGATACCCT**A**ACGTGCGGCTTCGCCGA
HCV5	**AT**TGGGGCCCCA**AT**GACCCCCGGCG**A**A**AA**TCGCGCAATTTGGGTAAGGTCATCGATACCCT**A**ACGTGCGG**A**TTCGCCGA
HCV6	**AT**TGGGGCCCCA**AT**GACCCCCGGCG**A**AGGTC**C**CGCAATTTGGGTAAGGTCATCGATACCCT**A**ACGTGCGGCTTCGCCGA

Table S5. *Cont.*

	396 400 410 420 430 440 450 460 470 474
H77 (NC_004102)	CCTCATGGGGTACATACCGCTCGTCGGCGCCCCTCTTGGAGGCGCTGCCAGGGCCCTGGCGCATGGCGTCCGGGTTCTG
HCV1	CCTCATGGGGTACAT**T**CCGCTCGTCGGCGCCCCTCTTGGAGGCGCTGCCAGGGCCCTGGCGCATGGCGTCCGGGTTCTG
HCV2	CCTCATGGGGTACAT**C**CC**TG**TCGT**T**GGCGCCCC**GG**TTGGAGGCG**TC**GCCAG**A**GC**T**CTGGC**A**CA**C**GG**T**GT**TA**GGGT**C**CTG
HCV3	CCTCATGGGGTACAT**C**CCGCTCGTCGGCGC**T**CC**CG**T**A**GGAGGCG**TC**GC**A**AG**A**GCCCT**C**GCGCATGGCGT**GA**GGG**CC**CT**T**
HCV4	CCTCATGGG**A**TACAT**C**CCGCTCGT**A**GGCGCCCC**CG**T**G**GG**T**GGCG**TC**GCCAGGGCCCTGGCGCATGGCGTC**A**GGG**C**T**G**TG
HCV5	CCTCATGGGGTACAT**C**CCGCTCGT**A**GGCG**G**CCC**CG**TTGG**G**GGCG**TC**GC**A**AGGGC**T**CT**C**GC**A**CA**C**GG**T**GT**GA**GGGTTCT**T**
HCV6	**T**CTCATGGGGTACAT**C**CC**CG**TCGT**A**GGCGC**G**CC**AT**T**G**GG**C**GGCG**TC**GC**GGCT**GCCCT**C**GC**A**CATGG**T**GT**GA**GGG**CAA**T**C**
	475 480 490 500 510 520 530 540 550 553
H77 (NC_004102)	GAAGACGGCGTGAACTATGCAACAGGGAACCTTCCTGGTTGCTCTTTCTCTATCTTCCTTCTGGCCCTGCTCTCTTGCC
HCV1	GAAGACGGCGTGAACTATGCAACAGGGAA**T**CTTCCTGGTTGCTCTTTCTCTATCTTCCTTCTGGCCCTGCTCTCTTGCC
HCV2	GA**G**GACGG**GA**T**A**AA**T**TATGCAACAGGGAA**T**CT**A**CC**C**GGTTGCTCTTT**T**TCTATCTTC**T**T**G**CT**T**GC**T**CT**T**CT**G**TC**G**TGC**A**
HCV3	GAAGACGG**GA**T**A**AA**T**T**TC**GCAACAGGGAAC**T**T**G**CC**C**GGTTGCTC**C**TT**T**TCTATCTTCCTTCT**T**GC**T**CTG**T**TCTCTTGC**T**
HCV4	GA**G**GACGG**GA**T**C**AA**T**TATGCAACAGGGAA**T**CTTCC**C**GGTTGCTCTTTCTCTATCTTCCT**CT**TGGC**A**CT**T**CTCTC**G**TGCC
HCV5	GA**G**GACGG**G**GT**A**AACTATGCAACAGGGAA**TT**T**G**CC**C**GGTTGCTCTTTCTCTATCTT**TA**T**C**CT**T**GC**A**CT**T**CT**T**TC**G**TGCC
HCV6	GA**G**GACGG**GA**T**C**AA**T**TATGCAACAGGGAA**T**CTTCC**C**GGTTGCTCTTTCTCTATCTTCCT**CT**TGGC**A**CT**A**CTCTC**G**TGCC
	554 560 570 580 590 600 610 620 632
H77 (NC_004102)	TGACTGTGCCCGCTTCAGCCTACCAAGTGCGCAATTCCTCGGGGCTTTACCATGTCACCAATGATTGCCCTAACTCGAG
HCV1	TGAC**C**GTGCCCGCTTCAGCCTACCAAGTGCGCAA**C**TCCTCGGGGCTTTACCATGTCACCAATGATTGCCCTAACTCGAG
HCV2	T**C**AC**A**GTGCC**A**G**TG**TC**T**GC**AGTGG**AAGT**CA**G**G**AA**CAT**C**AGTTCTAGC**TAC**T**A**G**G**C**CAC**T**AATGATTGC**T**C**G**AAC**AAC**AG
HCV3	T**A**A**T**T**CAT**CC**A**GC**AG**C**TAGTCTAG**A**G**TG**GC**G**G**AAT**A**C**G**TC**T**GG**C**CT**C**TAC**GTCC**T**T**ACCAA**C**GA**C**TG**TT**C**C**AAC**AGC**AG
HCV4	TGACTGT**C**CCCGC**C**TC**G**GC**TGTG**CA**CTAT**CGCAA**CG**CCTCGGGGC**AC**TACCA**CA**TCACCAATGA**C**TGCCC**G**AA**T**TC**C**AG
HCV5	TGAC**C**GT**C**CC**G**GC**C**TC**T**GC**AGTT**C**CCTAC**CG**A**AAT**G**CCTC**T**GGG**G**TTTA**T**CATGTCACCAATGATTGCCC**C**AACTC**TTC**
HCV6	T**C**AC**AAC**GCC**A**GC**C**TC**G**GC**AGT**CCA**CTACG**GCAA**CA**CC**A**C**T**GGG**A**T**A**TACCAT**C**TCACCAATGA**C**TGCCC**C**AACTC**C**AG

Table S5. *Cont.*

	633 640 650 660 670 680 690 700 711
H77 (NC_004102)	TATTGTGTACGAGGCGGCCGATGCCATCCTGCACACTCCGGGGTGTGTCCCTTGCGTTCGCGAGGGTAACGCCTCGAGG
HCV1	TATTGTGTACGAGGCGGCCGATGCCATCCTGCACACTCCGGGGTGTGTCCCTTGCGTTCGCGAGGGTAACGCCTCGAGG
HCV2	**C**AT**CACC**T**GGC**AG**CTCA**C**T**GA**C**GC**AG**T**T**CT**C**CAC**CT**TCC**T**GG**A**TG**C**GTCCC**A**TG**T**G**AGAAT**GA**TAA**T**GG**C**A**CCT**T**G**C**G**C**
HCV3	TATTGTGTA**T**GAGGC**C**G**AT**GA**C**G**TT**AT**T**CTGCACAC**A**CC**C**GG**C**TGTGT**A**CCTTG**T**GTTC**AG**GA**C**GG**C**AA**TA**C**A**TC**C**A**C**G
HCV4	**C**AT**A**GTGTA**T**GAGGC**T**G**A**C**C**AT**CA**CATC**T**TGCAC**CT**TCCGGGGTG**C**GT**G**CC**C**TG**T**GT**GA**G**GACC**GG**G**AAC**CAG**TCG**C**G**A**
HCV5	**C**AT**A**GT**C**TACGAGGC**T**G**AAA**A**CCTG**ATC**T**T**A**CAC**G**C**A**CC**T**GG**T**TG**C**GT**G**CC**C**TG**T**GT**CA**G**GC**A**A**G**A**TAA**T**G**T**C**AGT**AGG
HCV6	**C**AT**C**GTGTA**T**GAGGCGG**AT**G**C**T**ATG**ATC**T**TGCA**TCT**TCC**T**GG**A**TG**C**GT**G**CC**G**TG**T**GT**CA**G**G**G**TC**GGTAA**TCAG**TC**C**A**CC**
	712 720 730 740 750 760 770 780 790
H77 (NC_004102)	TGTTGGGTGGCGGTGACCCCCACGGTGGCCACCAGGGACGGCAAACTCCCCACAACGCAGCTTCGACGTCATATCGATC
HCV1	TGTTGGGTGGCG**C**TGACCCCCACGGTGGCCACCAGGGACGGCAAACTCCCCACAACGCAGCTTCGACGTCA**C**ATCGATC
HCV2	TG**C**TGG**ATACAA**GT**A**AC**A**CC**T**A**AT**GTGGC**TGTG**A**AAC**AC**C**GC**GGTGCA**C**T**CAC**TCACACC**CT**G**CGA**ACA**CA**CG**TCGA**CA**
HCV3	TG**C**TGGA**CCC**C**A**GTGAC**A**CC**T**AC**A**GTGGC**AGT**CAGG**T**ACG**T**C**GG**A**GCAA**CCAC**CG**C**TTC**G**A**T**A**CG**CA**GTCAT**G**T**G**GA**C**C
HCV4	TG**C**TGGGTGGC**CT**TGACCCCCAC**T**GTGGC**TG**C**GCCAT**AC**CT**C**GGTGCT**CC**ACTTGA**G**TCCA**T**G**CG**G**CGTCAT**G**T**G**GA**C**C
HCV5	TG**C**TGGGT**CCAAA**T**C**ACCCCCAC**AC**TG**T**C**AGC**CC**C**G**AG**C**TT**C**GG**A**GCGGT**CAC**GG**C**T**C**CT**CTTCG**GA**G**GGCCG**T**T**GA**CT**
HCV6	TG**C**TGG**CATC**C**T**GTG**T**CCCCCAC**CC**TGGCC**GT**C**CCAA**ACG**C**C**TCCGTG**CCC**G**CAACG**GG**G**T**T**C**CG**C**AG**G**CAT**G**T**G**GA**C**C
	791 800 810 820 830 840 850 860 869
H77 (NC_004102)	TGCTTGTCGGGAGCGCCACCCTCTGCTCGGCCCTCTACGTGGGGGACCTGTGCGGGTCTGTCTTTCTTGTTGGTCAACT
HCV1	TGCTTGTCGGGAGCGCCACCCTCTGCTCGGCCCTCTACGTGGGGGACCTGTGCGGGTCTGTCTTTCTTGT**C**GGTCAACT
HCV2	TG**A**T**C**GTA**AT**G**GCA**GC**T**AC**GG**TCTGCTCGGCC**T**T**G**TACGTGGG**A**GA**TG**TGTGCGGG**G**C**C**GT**GA**T**GA**T**C**G**CGTCG**CA**GGC**
HCV3	T**AT**T**A**GT**G**GG**CGCG**GCCAC**GA**T**G**TGCTC**T**GC**G**CTCTACGTGGG**T**GA**TA**TGTG**T**GGG**G**C**C**GTCTT**C**CTTGT**G**GG**A**CAA**GC**
HCV4	TG**A**T**G**GT**G**GG**CGC**CGCCAC**T**CT**G**TGCTC**C**GCCCT**T**TACGT**C**GG**A**GACCTGTG**T**GGG**GG**TGTCTT**C**CT**A**GT**G**GGTCA**GA**T
HCV5	**ACT**T**A**G**CG**GG**AG**G**G**GC**TG**CCCTCTGCTC**C**GC**G**CT**A**TACGT**C**GG**A**GAC**GC**GTGCGGG**G**C**A**GT**G**TTT**T**T**G**GT**A**GG**C**CAA**A**T
HCV6	T**TC**T**G**GT**G**GG**CGC**CGC**AG**C**GGTT**TGCTC**A**GCCCT**G**TAC**A**T**C**GGGGA**T**CTGTGCGG**TGG**TGTCTT**C**CT**G**GT**G**GG**A**CAACT

Table S5. *Cont.*

	870 880 890 900 910 920 930 940 948
H77 (NC_004102)	GTTTACCTTCTCTCCCAGGCGCCACTGGACGACGCAAGACTGCAATTGTTCTATCTATCCCGGCCATATAACGGGTCAT
HCV1	GTT**C**ACCTTCTCTCCCAGGCGCCACTGGACGACGCAAGACTGCAATTGTTCTATCTATCCCGGCCATATAACGGGTCA**C**
HCV2	**T**TT**C**A**TAG**T**A**TC**G**CC**ACAA**C**A**CCAC**AACTTC**ACC**C**CAAGA**G**TGCAA**C**TGTTC**C**ATCTA**CCAA**GG**T**CA**C**AT**C**AC**C**GG**C**CA**C**
HCV3	**C**TT**C**AC**G**TTC**AGA**CC**TC**G**T**CGCCA**TCAA**ACG**GTC**CA**GAC**CTG**T**AA**C**TG**C**TC**AC**T**G**TA**C**CC**A**GGCCAT**C**T**T**AC**A**GG**A**CAT
HCV4	GTT**C**ACCTTC**CAG**CC**GC**G**C**CGCCACTGGAC**C**AC**C**CA**G**GACTGCAATTGTTC**C**ATCTA**CA**C**T**GGCCA**C**AT**C**AC**A**GG**C**CA**C**
HCV5	GTT**C**ACCT**ATAGG**CC**TC**G**C**C**AG**CA**TACT**ACG**GT**GCA**G**GACTGCAA**C**TGTTC**C**AT**T**TA**CAGT**GGCCATAT**C**AC**C**GG**C**CA**C**
HCV6	**T**TT**C**ACCTTC**CGA**CCC**C**G**C**CGCCA**TCA**GAC**CGT**GCAAGACTGCAA**C**TG**C**TC**C**ATCTAT**A**C**A**GGCCA**CG**T**C**AC**C**GG**C**CA**C**
	949 960 970 980 990 1000 1010 1020 1027
H77 (NC_004102)	CGCATGGCATGGGATATGATGATGAACTGGTCCCCTACGGCAGCGTTGGTGGTAGCTCAGCTGCTCCGGATCCCACAAG
HCV1	CGCATGGCATGGGATATGATGATGAACTGGTCCCCTAC**AA**C**G**GCG**C**TGGT**A**GTAGCTCAGCTGCTCCGGATCCCACAAG
HCV2	CGCATGGCATGGGA**C**ATGATGATGAACTGGTC**A**CC**A**AC**TCTTA**C**CA**TG**A**T**CC**T**G**GC**CT**A**CGCTGCT**CG**TG**T**T**CC**TG**A**GC**
HCV3	CG**A**ATGGC**T**TGGGATATGATGATGAA**T**TGGTCCCC**CG**C**T**G**TG**G**GTA**TGGTGGT**G**GC**G**CA**CG**T**C**CT**G**CGG**T**T**G**CC**C**CA**GA**
HCV4	**GTTCACCTTCCA**G**CCGC**G**CC**G**CCACTGGACCA**CCC**AGGACTGCAA**TTG**T**T**CCATCTA**CA**CTG**GC**CA**C**ATCA**C**AGG**C**C**AC
HCV5	CGGATGGCATGGGA**C**ATGATGATGAA**T**TGGTC**A**CCTACG**A**CAGC**C**TTG**C**TG**A**T**G**GC**C**CAG**T**TG**T**T**A**CGGAT**T**CC**C**CA**G**G
HCV6	**A**GGATGGC**T**TGGGA**C**ATGATGATGAACTGGTC**A**CC**C**AC**A**GC**CA**C**T**T**AT**GT**CC**T**CT**CT**AGCG**T**C**CT**GA**G**AG**T**A**CC**T**CA**GA**
	1028 1040 1050 1060 1070 1080 1090 1100 1106
H77 (NC_004102)	CCATCATGGACATGATCGCTGGTGCTCACTGGGGAGTCCTGGCGGGCATAGCGTATTTCTCCATGGTGGGGAACTGGGC
HCV1	CCATC**T**TGGACATGATCGCTGGTGC**C**CACTGGGGAGTCCTGGCGGGCATAGCGTATTTCTCCATGGTGGGGAACTGGGC
HCV2	**T**C**G**TC**C**T**T**GA**A**AT**C**ATC**TTC**GG**C**G**GC**CACTGGGG**T**GT**GA**TG**TTT**GGC**T**T**G**GC**C**TA**C**TTCTCCATG**CA**GGG**AGCG**TGGGC
HCV3	CC**T**T**GT**T**C**GACAT**A**AT**A**GC**C**GG**G**GC**C**CA**T**TGGGG**CA**TC**T**TGGCGGGC**C**TAGC**C**TATT**A**CTCCATG**CA**GGG**C**AACTGGGC
HCV4	CC**C**T**GG**T**T**GACATG**C**TCGC**G**GG**C**G**GC**CACTGGGG**C**GTCCTGGC**T**GGCAT**G**GCGT**TC**TTC**AG**CATG**CA**GG**CC**AA**T**TGGGC
HCV5	**TGG**TCAT**T**GACAT**C**AT**T**GC**C**GG**G**G**GC**CACTGGGG**G**GTC**T**TG**TTC**G**C**C**GCC**GC**A**TACTTC**G**C**GTCAAC**GG**CT**AACTGGGC
HCV6	**TGC**TC**C**T**T**GA**G**ATG**TTACT**TGGTG**GC**CA**T**TGGGG**C**GTCCT**A**G**GT**G**C**C**G**T**GGT**GTACTTC**AGT**ATGGTGGG**C**AACTGGGC

Table S5. *Cont.*

	1107 1120 1130 1140 1150 1160 1170 1180 1185
H77 (NC_004102)	GAAGGTCCTGGTAGTGCTGCTGCTATTTGCCGGCGTCGACGCGGAAACCCACGTCACCGGGGGAAGTGCCGGCCGCACC
HCV1	GAAGGTCCTGGTAGTGCTGCTGCTATTTGCCGGCGTCGACGCGGAAACCCACGTCACCGGGGG**G**A**C**TGCCG**C**CCGCACC
HCV2	**C**AA**A**GTC**A**T**T**G**CCA**T**C**CT**C**CT**T**CT**TG**T**C**GC**G**GG**A**GT**G**GA**T**GC**AACC**ACC**T**A**TAC**CACCGG**C**GG**GCAA**GC**G**GG**T**CG**T**ACC
HCV3	**C**AAGGTC**GCTA**T**CA**T**CA**TG**G**T**TA**T**G**TTT**T**C**A**GG**G**GTCGA**T**GC**CACC**AC**AT**A**TAC**CACCGG**T**GG**C**A**C**TGC**A**G**CT**C**AT**AC**T**
HCV4	**C**AAGGTC**A**T**CC**T**G**GT**C**CTG**T**T**C**CT**C**TTTGC**T**GG**G**GT**T**GACGC**CA**A**C**ACCCACGTCACCGGGGG**G**A**CC**GC**G**GGCC**A**CACC
HCV5	**C**AAGGT**TG**TG**C**T**G**GT**CT**TG**T**T**T**CT**G**TTTGC**G**GG**G**GTCGA**T**GC**CA**A**C**ACCCAC**ACTGTG**GG**C**GG**T**A**C**TGC**T**G**CT**C**AA**A**GT**
HCV6	**A**AAGGTCCTGG**CT**GT**T**CTGCT**C**CT**C**TTTGC**A**GG**G**GT**T**GA**T**GC**AACC**ACC**ACCAC**CACCGG**C**GG**CGCA**GC**G**GGCCGCACC
	1186 1190 1200 1210 1220 1230 1240 1250 1260 1264
H77 (NC_004102)	ACGGCTGGGCTTGTTGGTCTCCTTACACCAGGCGCCAAGCAGAACATCCAACTGATCAACACCAACGGCAGTTGGCACA
HCV1	ACG**T**CTGGG**T**TTG**CGA**G**C**CTC**T**T**C**ACACCAGGCGCCAAGCAGAACATCCA**G**CTGATCAACACCAACGGCAGTTGGCACA
HCV2	AC**TT**C**G**GGG**T**T**C**G**C**T**A**G**C**CTC**T**TTAC**C**CC**T**GG**TC**CCAAGCAGAACATCCA**G**CT**A**ATCAACACCAA**T**GGCAG**C**TGGCACA
HCV3	**G**C**CAGC**GGGCTTG**C**T**A**G**C**CT**TT**T**C**A**GT**CC**G**GGCGCCAA**A**CAGAA**AC**T**G**CA**G**CTG**G**TCAACACCAA**T**GGC**T**C**G**TGGCACA
HCV4	**G**C**CT**C**C**GG**C**CTTG**CCA**G**C**CTC**T**T**C**AC**C**CC**G**GG**GT**CCA**G**GCAGAAC**C**TCCA**G**CT**C**ATCAACACCAACGG**G**AG**C**TGGCACA
HCV5	**G**CG**AGC**G**CC**CT**C**G**CCA**G**C**CTC**T**T**C**AC**C**CC**T**GG**GC**C**GC**AGCAGAA**GT**T**G**CA**G**CT**C**AT**A**AA**T**ACCAACGG**G**AG**C**TGGCACA
HCV6	**G**C**TT**C**C**GG**C**CT**CACCA**G**C**CT**TT**T**C**AC**C**CC**C**GG**T**GCCAAGCAGAA**TC**TCCA**G**CT**T**ATCAACACCAA**T**GGCAG**C**TGGCACA
	1265 1270 1280 1290 1300 1310 1320 1330 1340 1343
H77 (NC_004102)	TCAATAGCACGGCCTTGAACTGCAATGAAAGCCTTAACACCGGCTGGTTAGCAGGGCTCTTCTATCAGCACAAATTCAA
HCV1	TCAATAGGACGGCCTTGAACTGCAATGACAGCCT**C**AACACCGGCTGG**C**TAGCAGGGCT**G**TTCTAT**T**A**C**CACAAATTCAA
HCV2	T**A**AA**CC**GGAC**C**GCC**C**T**C**AA**T**TGCAATGACAGC**T**T**GC**A**G**AC**G**GG**T**T**TCA**T**C**GC**TTCC**CT**G**TT**T**TA**CGCCA**ACAA**G**TTCAA
HCV3	TCAA**C**AG**C**AC**T**GCC**C**TGAACTGCAATGA**TTC**C**A**T**A**AACACCGG**G**T**TCA**TAGC**T**GGG**T**T**G**TT**T**TAT**T**A**T**CA**T**AA**G**TTCAA
HCV4	TCAA**C**AGGAC**T**GCC**C**T**C**AA**T**TGCAATGACAGCCT**GC**ACAC**G**GG**G**T**TCA**T**G**GC**T**GG**C**CT**G**TTCTA**CTCC**CACAA**G**TTCAA
HCV5	TCAA**C**AG**A**AC**T**GCC**C**T**T**AA**T**TG**T**AATGACAGCCTC**C**A**G**AC**T**GG**G**T**TTA**TAGC**C**GG**C**CTC**A**T**G**TAT**G**A**C**CA**T**AA**G**TTCAA
HCV6	T**A**AA**C**AGGAC**T**GC**TC**TGAACTGCAATGA**TTC**CCTC**C**A**G**AC**G**GG**G**T**TCA**TAGC**G**GG**C**CT**G**TT**T**TA**C**CA**C**CACAAATTCAA

Table S5. *Cont.*

	1344 1350 1360 1370 1380 1390 1400 1410 1422
H77 (NC_004102)	CTCTTCAGGCTGTCCTGAGAGGTTGGCCAGCTGCCGACGCCTTACCGATTTTGCCCAGGGCTGGGGTCCTATCAGTTAT
HCV1	CTCTTCAGGCTG**C**CC**C**GAGAGG**A**TGGCCAGCTGCCGAC**C**CCTT**G**CCGATTT**C**GCCCAGGGCTGGGG**C**CCTATCAGTTAT
HCV2	C**AGC**TC**T**GGCTG**C**CC**C**GAG**C**G**C**TTG**T**C**TTC**CTGCCG**CA**G**G**CT**GGA**CGATTTT**CG**C**ATC**GG**G**TGGGG**AA**C**CT**T**GGAA**TA**C**
HCV3	CTCT**A**C**T**GG**A**TGTCCT**C**A**A**AGG**CT****CAG**CAGCTGC**AAG**C**C**C**A**T**C**AC**TTTC**TT**CAAG**CAGGG**G**TGGGG**C**CC**CT**T**G**A**CAG**AT
HCV4	C**AGC**TCCGG**G**TGTCC**A**GAGAGG**C**T**T**GCCAGCTGC**AAG**CGCCTT**GA**CGA**C**TT**CC**C**A**CAGGGCTGGGG**C**CC**G**C**T**T**G**G**GGTC**
HCV5	CTC**C**TC**T**GG**G**TGTCC**A**GAG**C**GG**A**TGGC**T**AGCTG**TAAG**C**C**CCTT**G**CCG**CA**TT**C**G**A**CCAGGGCTGGGG**AA**CTATCAG**C**TAT
HCV6	CTC**C**TC**G**GGCTG**C**CC**A**GA**AC**G**CA**TG**A**C**TGCG**TGC**AAG**C**C**CCT**CG**CC**T**A**C**TT**C**G**A**CCAGGG**G**TGGGG**C**CC**A**ATCA**CA**TAT
	1423 1430 1440 1450 1460 1470 1480 1490 1501
H77 (NC_004102)	GCCAACGGAAGCGGCCTCGACGAACGCCCCTACTGCTGGCACTACCCTCCAAGACCTTGTGGCATTGTGCCCGCAAAGA
HCV1	GCCAACGGAAGCGGCC**C**CGAC**C**A**G**CGCCCCTACTGCTGGCACTACCC**C**CCAAA**A**CCTTGTGG**T**ATTGTGCCCGCAAAGA
HCV2	G**AG**A**C**C**ACC**AACG**ATGAG**GAC**ATGA**G**G**CC**G**TACTGCTGGCA**T**TACCC**C**CC**G**A**AG**CCTTG**C**GG**T**AT**C**GT**C**CC**G**GC**T**A**G**GA
HCV3	GC**T**AACGG**TCC**C**TCTGAT**GAC---**A**G**A**CC**G**TACTGCTGGCACTAC**G**C**A**CC**T**AGACCTTGTG**A**CA**C**TGT**C**CC**G**GCA**TCA**A
HCV4	GC**T**AACGG**CCC**C**TCTGAT**GA**T**---**A**G**G**CC**T**TACTGCTGGCACTAC**G**C**G**CC**TC**GACC**A**TG**C**GG**GG**T**G**GTGCCCGCA**TCC**A
HCV5	GCCAACGG**CCC**C**A**G**TGAT**GAC---**AAG**CC**A**TA**T**TGCTGGCACTA**T**CC**C**CCA**C**GACC**G**TG**C**GG**AG**T**G**GTGCC**A**GC**CCGAG**
HCV6	GCCAACGG**CCC**C**TC**C**GAT**GAC---**A**G**G**CCCTACTGCTGGCA**T**TAC**G**CTCC**C**AG**G**CC**C**TGTG**A**C**G**T**G**GTGCC**G**GC**C**A**GC**A
	1502 1510 1520 1530 1540 1550 1560 1570 1580
H77 (NC_004102)	GCGTGTGTGGCCCGGTATATTGCTTCACTCCCAGCCCCGTGGTGGTGGGAACGACCGACAGGTCGGGCGCGCCTACCTA
HCV1	**A**CGTGTGTGGCCC**A**GT**G**TATTGCTTCACTCCCAGCCCCGTGGTGGTGGGAACGACCGACAGGTCGGGCGCGCCTACCTA
HCV2	**CG**GT**T**TG**C**GG**G**CCGGT**C**TA**C**TG**T**TTCAC**C**CCCAGCCC**T**GT**T**GT**C**GTGGG**C**AC**C**AC**T**GACAGG**CA**GGGCG**T**GCC**C**ACCTA
HCV3	G**T**GT**C**TG**C**GGCCC**T**GT**G**TA**C**TGCTTCAC**A**CC**ATCG**CC**A**GTGGT**C**GT**A**GG**C**AC**T**AC**T**GA**TGCTAA**GGGCGC**C**CC**A**ACCTA
HCV4	**AA**GTGTGTGGCCC**C**GT**G**TA**C**TG**T**TTCAC**A**CCCAGCCC**T**GTGGTGGT**C**GG**C**AC**C**ACCGAC**C**GG**CTC**GG**G**G**TC**CC**C**ACCTA
HCV5	**AT**GT**C**TG**C**GG**T**CC**A**GT**C**TA**C**TG**T**TT**T**AC**A**CC**T**AGCCC**A**GTGGT**C**GT**T**GG**C**AC**C**ACCGAC**C**G**CAGA**GG**GTAT**CCC**C**AC**T**TA
HCV6	**CG**GTGTG**C**GGCCC**T**GT**C**TA**C**TGCTTCAC**A**CCCAGCCC**T**GTGGTGGT**T**GG**C**AC**C**AC**T**GACAGG**AG**GGG**GAAC**CC**C**AC**A**TA

Table S5. *Cont.*

	1581 1590 1600 1610 1620 1630 1640 1650 1659
H77 (NC_004102)	CAGCTGGGGTGCAAATGATACGGATGTCTTCGTCCTTAACAACACCAGGCCACCGCTGGGCAATTGGTTCGGTTGTACC
HCV1	CAACTGGGGTG**AG**AATGA**G**ACGGA**C**GTCTTCGTCCTTAACAACACCAGGCCACCGCTGGGCAATTGGTTCGGTTGTACC
HCV2	CA**C**CTGGGG**G**G**A**AAATGA**G**AC**C**GATGTCTTC**C**T**G**CT**A**AACA**G**CAC**A**AG**A**CC**C**CCGC**AA**GG**AGC**TTGGTTCGG**C**TG**C**AC**T**
HCV3	CA**C**CTGGGGTG**AG**AATGA**G**AC**A**GA**C**GT**G**TTC**C**T**G**CT**GG**A**GTC**C**CTGC**GGCC**T**CC**CAGT**GG**TCGG**TGGTT**T**GG**G**TG**C**AC**G**
HCV4	CA**C**CTGGGG**G**G**AG**AATGA**G**AC**T**GATGT**G**TTC**A**TCCT**G**AAC**TCG**ACCAGGCC**T**CC**C**C**GA**GGC**GCG**TGGTTCGG**G**TG**C**AC**G**
HCV5	CAACTGGGG**C**G**AC**AATGA**G**AC**T**GA**CA**TCTT**TC**TC**T**T**G**AACAACAC**G**AGGCC**C**CC**TACT**GGCAA**C**TGGTTCGG**C**TG**C**ACC
HCV6	CA**C**CTGGGG**G**G**AG**AATGA**G**ACGGATGT**G**TTC**A**T**G**CT**GG**A**A**A**G**C**CTGC**GGCC**C**CC**TACT**GG**AGGA**TGGTTCGG**G**TG**C**AC**G**
	1660 1670 1680 1690 1700 1710 1720 1730 1738
H77 (NC_004102)	TGGATGAACTCAACTGGATTCACCAAAGTGTGCGGAGCGCCCCCTTGTGTCATCGGAGGGGTGGGCAACAACACCTTGC
HCV1	TGGATGAACTCAACTGGATTCACCAAAGTGTGCGGAGCGCCCCCTTGTGTCATCGGAGGGGTGGGCAACAACACCTTGC
HCV2	TGGATGAAC**GGG**ACTGG**G**TTCAC**T**AA**GACA**TGCGG**C**GC**A**CC**A**CCTTG**CCG**CAT**TA**G**GA**GGG**ACTT**CA**CTCT**C**GATC**T**AT**
HCV3	TGGATGAACTC**C**AC**G**GG**G**TT**TGT**CAA**GAC**GTGCGGAGC**T**CCCCCTTGT**AA**CATC**TAT**GGGG**GTCC**C**G**A**GTC**A**GA**C**C**T**CT**
HCV4	TGGATGAAC**AGC**AC**T**GG**G**TTCAC**A**AAAA**ACC**TGCGG**G**GC**C**CC**T**CC**A**TG**CAAGG**T**GCAGACCAAC**---AAC**G**ACACCT**G**G**A**
HCV5	TGGATGAACTC**C**ACAGG**G**TT**TGTG**AA**GACT**TGCGGAGC**C**CC**G**CC**C**TG**CAA**C**T**T**A**GG**GCC**G**ACA**---AACAACA**G**C**C**T**CA**
HCV6	TGGATGAACTC**C**AC**G**GG**C**TT**TGT**CAA**GACA**TG**T**GG**T**GC**C**CC**G**CC**G**TGT**AA**G**AT**?

Table S5. *Cont.*

	1818 1830 1840 1850 1860 1870 1880 1890 1896
H77 (NC_004102)	GTGCATGGTCGACTACCCGTATAGGCTTTGGCACTATCCTTGTACCATCAATTACACCATATTCAAAGTCAGGATGTAC
HCV1	GTGC**C**TGGTCGACTACCC**A**TATAGGCTTTGGCA**T**TATCCTTGTACC**G**TCAA**C**TACACCAT**C**TTCAAAGTCAGGATGTAC
HCV2	GTGC**C**TGGT**A**GACTACCC**T**TATAG**A**CT**G**TGGCA**T**TATCC**G**TG**C**AC**TG**T**A**AATT**TT**ACCAT**C**TTCAA**G**GT**GC**GGATGTA**T**
HCV3	GTGCATGGTCGACTACCC**A**TA**CC**GGCTTTGGCA**T**TA**C**CC**A**TGTAC**AG**TCAATT**T**CAC**AT**T**G**TTCAA**G**GT**G**AGGATGT**TT**
HCV4	GTGCATGGTC**C**ACTACCC**A**TA**CC**GGCT**G**TGGCACTA**C**CC**A**TG**C**AC**TG**TCAA**C**TACACCAT**C**TT**T**AA**G**GTCAGGATGTA**T**
HCV5	GTG**TT**TGGT**GC**ACTACCC**T**TA**CC**GG**T**T**G**TGGCA**T**TA**C**CC**G**TG**C**ACC**G**T**A**AATTA**T**ACCAT**C**TT**T**AA**G**GT**GC**G**C**ATGTAC
HCV6	GTG**TC**TGGT**G**GACTACCC**T**TA**C**AGGCT**G**TGGCACTA**C**CC**C**TG**C**AC**TG**TCAA**C**T**T**CACCAT**GCA**CAA**G**GTC**C**GGATGT**T**C
	1897 1910 1920 1930 1940 1950 1960 1970 1975
H77 (NC_004102)	GTGGGAGGGGTCGAGCACAGGCTGGAAGCGGCCTGCAACTGGACGCGGGGCGAACGCTGTGATCTGGAAGACAGGGACA
HCV1	GTGGGAGGGGTCGAGCACAGGCTGGAAGC**T**GCCTGCAACTGGACGCGGGGCGA**G**CG**T**TGTGATCTGGA**G**GACAGGGACA
HCV2	GT**A**GG**G**GGGGT**G**GAGCA**TC**GG**T**T**CTCC**GC**A**GC**A**TGCAACT**TC**ACGCG**C**GG**G**GA**C**CGCTG**CAGAT**TGGAAGACAGGGA**T**A
HCV3	GTGGG**T**GGG**T**T**T**GA**A**CAC**C**GG**T**T**TACC**GC**C**GC**T**TGCAACTGGAC**CA**GGGG**G**GA**G**CGCTG**C**GAT**A**T**C**GA**G**GA**TC**G**T**GAC**C**
HCV4	GT**T**GG**C**GGG**A**T**A**GAGCA**TC**GGCTGGA**G**GCGGC**A**TGCAACTGGAC**CA**GGGG**G**GAAC**C**CTG**C**G**GCT**TGGA**GC**ACAG**A**GA**TC**
HCV5	**A**T**T**GG**G**GG**CC**T**A**GAGCACAGGCT**T**GAAGCGGC**A**TGCAACTGGAC**C**CG**C**GG**T**GA**G**CG**G**TGTGA**C**CT**C**GAAGACAG**A**GA**T**A
HCV6	GTGGG**G**GG**C**GT**T**GAGCACAGG**T**T**T**GA**T**GC**C**GC**A**TGCAA**T**TGGAC**C**CGGGG**G**GA**G**CG**G**TG**C**GA**G**CTGGA**T**GACAG**A**GACA
	1976 1980 1990 2000 2010 2020 2030 2040 2050 2054
H77 (NC_004102)	GGTCCGAGCTCAGCCCATTGCTGCTGTCCACCACACAGTGGCAGGTCCTTCCGTGTTCTTTCACGACCCTGCCAGCCTT
HCV1	GGTCCGAGCTCAGCCC**GC**TGCTGCTGTCCACCACACAGTGGCAGGTCCTTCCGTGTTCCTTCACGACCCTGCCAGCCTT
HCV2	GG**GGTC**AGC**AG**AG**T**CCA**C**TGCTGC**AT**TCCACCAC**TG**AGTGG**GC**GGT**GT**T**G**CC**A**TG**C**TCCTTC**T**C**CGA**CCT**A**CC**G**GC**AC**T
HCV3	G**CAG**CGAGC**A**A**CAT**CC**GC**TGCTGC**AT**TC**A**AC**A**AC**TG**AG**CTTGCTA**T**A**CT**G**CC**T**TG**C**TC**T**TTCACG**C**CC**A**TGCC**T**GC**A**TT
HCV4	G**CA**C**A**GAGCT**GTCG**CC**C**TTGCT**C**CT**T**TCCACCACACAGTGGCAGGTCCTCCC**C**TG**C**TCCTTCAC**C**ACCCTGCC**T**GCC**C**T
HCV5	GG**G**CCGAGCT**G**AGCCC**GC**T**C**CT**A**C**ACA**CCACCACACAGTGG**GCCA**T**AT**T**G**CCGTG**C**TC**T**TTCAC**AC**CC**AC**GCC**C**GC**TC**T
HCV6	GG**ATT**GAG**A**T**G**AGCCC**GC**T**C**CTG**T**T**C**TC**A**ACCAC**G**CAG**CTTGCCA**TCCT**G**CC**C**TG**C**TC**A**TT**T**AC**C**ACC**A**TGCC**T**GCC**C**T

Table S5. *Cont.*

	2055 2060 2070 2080 2090 2100 2110 2120 2130 2133
H77 (NC_004102)	GTCCACCGGCCTCATCCACCTCCACCAGAACATTGTGGACGTGCAGTACTTGTACGGGGTAGGGTCAAGCATCGCGTCC
HCV1	GTCCACCGGCCTCATCCACCTCCACCAGAACAT**C**GTGGACGTGCA**A**TACTTGTACGGGGT**G**GGGTCAAGCAT**T**G**T**GTCC
HCV2	**A**TC**T**AC**T**GGCCT**AT**T**G**CACCTCCACCA**A**AACAT**C**GTGGACGTGCAGTAC**C**T**C**TA**T**GG**AC**T**TTCTC**C**GGCT**ATC**A**C**AAGA**
HCV3	GTC**A**AC**A**GG**T**CT**A**AT**A**CACCTCCACCA**A**AACAT**C**GTGGA**T**GT**C**CA**A**TAC**C**T**T**TA**T**GG**T**GT**T**GG**A**TC**TG**GCAT**G**G**T**G**GGA**
HCV4	**C**TC**G**AC**T**GGC**T**T**G**ATCCACCTCCACCAGAACAT**C**GTGGACGT**C**CAGTAC**C**T**T**TACGG**T**GT**T**GGGTC**CGCGG**T**G**G**T**GT**CA**
HCV5	**TAG**CAC**T**GGCCTCAT**A**CAC**T**T**A**CA**T**CAGAA**T**AT**A**GT**A**GAC**ACC**CAGTAC**C**T**T**TACGG**CC**T**GA**G**C**TC**C**AGCATCG**TC**TC**G**
HCV6	**A**TC**A**AC**T**GGCCTCATCCACCT**G**CACCAGAACAT**A**GTGGACGTGCAGTAC**C**T**C**TACGG**A**GT**CTCC**TC**G**AGCATCG**TC**TC**G**
	2134 2140 2150 2160 2170 2180 2190 2200 2212
H77 (NC_004102)	TGGGCCATTAAGTGGGAGTACGTCGTTCTCCTGTTCCTCCTGCTTGCAGACGCGCGCGTCTGCTCCTGCTTGTGGATGA
HCV1	TGGGCCAT**C**AAGTGGGAGTACGTCGTTCTCCTGTTCCT**T**CTGCTTGCAGACGCGCGCGTCTGCTCCTGCTT**G**TGGATGA
HCV2	T**ACAT**C**G**T**G**AAGTGGGAGT**GG**GT**G**GT**C**CTCCT**T**TTCCT**G**CTG**T**T**G**GCAGACGC**CA**G**G**GTCTG**TG**C**A**TGC**C**TTTGGATG**C**
HCV3	TGGGC**GT**T**G**AA**A**TGGGAGT**T**CGTC**A**T**C**CTC**GTT**TTCCTCCT**C**CT**A**GCAGACGC**A**CGCGTGTGC**GTTGC**C**C**TTTGG**C**TGA
HCV4	TGGGC**TC**T**C**AAGTGGGAGTACGT**T**GT**G**CT**TGCC**TTCCT**G**CTGCT**C**GCAGACGC**CA**G**G**GTCTG**TG**C**G**TGC**C**T**G**TGGATGA
HCV5	TGGGCC**G**TTAAGTGGGAGTAC**A**T**A**GT**G**CT**GGCC**TT**TT**T**A**CT**A**CTTGC**T**GA**T**GC**C**CG**TA**TCTG**TA**C**T**TGC**C**T**G**TGGAT**C**A
HCV6	TGGGC**AG**T**G**AAGTGGGAGTACGT**T**GT**C**CT**GG**TGTTCCT**GG**TGCT**G**GCAGA**T**GC**T**CGC**A**T**T**TG**TG**C**G**TG**TC**T**G**TGG**T**TGA
	2213 2220 2230 2240 2250 2260 2270 2280 2291
H77 (NC_004102)	TGTTACTCATATCCCAAGCGGAGGCGGCTTTGGAGAACCTCGTAATACTCAATGCAGCATCCCTGGCCGGGACGCACGG
HCV1	TG**C**TACTCATATCCCAAGCGGAGGCGGCTTTGGAGAACCTCGT**GG**TACTCAATGCAGCATCCCTGGCCGGGACGCACGG
HCV2	T**CA**T**CA**T**AC**T**GGG**CCAAGC**C**GAGGCGGC**GCTT**GAGAA**G**CTC**A**T**C**AT**CT**T**GC**A**CT**C**C**GC**TAG**C**GCT**GC**TAGTG**C**CA**A**T**GG
HCV3	TG**C**T**GA**T**G**ATATC**A**CAAGC**A**GA**A**GC**A**GC**C**TTGGAGAACCT**T**GT**C**A**CG**CT**G**AA**C**GC**C**G**TCG**C**TGCT**GCCGGGAC**A**CA**T**GG
HCV4	TG**C**T**G**CT**GG**T**G**TC**G**CA**G**G**TT**GAGGC**A**GC**CC**TGG**CC**AACCT**GA**T**T**A**CCA**TCAATGC**T**G**TT**TC**AGCC**GC**T**GG**C**AC**T**CACGG
HCV5	TG**C**T**C**CT**AG**T**T**T**GT**CA**G**GC**T**GA**A**GC**A**GC**CC**TGGAGAAC**G**TC**A**T**TG**T**C**CT**A**AA**C**GC**G**GC**TG**C**GGCC**GC**G**GGGAC**T**CA**T**GG
HCV6	TG**C**T**G**CTC**G**TA**GG**CCAAGC**T**GAGGC**A**GC**AC**TGGAGAACCT**TA**T**CG**T**C**CTCAA**C**GC**G**GC**C**TC**TGCC**GCC**A**G**C**AC**T**CACGG

Table S5. *Cont.*

	2292 2300 2310 2320 2330 2340 2350 2360 2370
H77 (NC_004102)	TCTTGTGTCCTTCCTCGTGTTCTTCTGCTTTGCGTGGTATCTGAAGGGTAGGTGGGTGCCCGGAGCGGTCTACGCCTTC
HCV1	TCTTGTGTCCTTCCTCGTGTTCTTCTGCTTTGC**C**TGGTATCTGAAGGGTAGGTGGGTGCCCGGAGCGG**C**CTACGCC**C**TC
HCV2	**G**CT**GC**TGT**GG**TTC**T**TC**A**T**C**TTCTT**TATAGCG**GC**C**TGGTA**CT**T**A**AAGGG**C**AGG**GT**GGT**C**CCCG**TG**GC**CACG**TAC**T**C**TG**T**T**
HCV3	T**A**T**C**G**GC**T**GG**T**A**CCT**G**GT**AGC**CTT**T**TGC**GCG**GCGTGG**C**A**CG**TG**CG**GGGTA**AACTT**GT**C**CC**GCTG**G**T**G**AC**CTAC**AG**C**C**T**G**
HCV4	**GT**T**CTAC**T**A**C**GC**C**A**TC**C**T**T**TTC**A**TCTG**TG**T**G**GC**T**TGGTAT**G**T**C**AAGGG**C**AGG**CTCCCAG**C**T**G**CT**GC**C**G**C**CTACGC**AGCT**
HCV5	**GT**T**CT**T**C**T**GGGGTT**T**GC**T**CG**TC**A**TCTGCTT**C**GC**C**TGG**C**A**CT**T**C**AAGGG**C**AGGT**T**GGT**C**CCCGG**G**GC**CAC**CTAC**CTT**T**G**C
HCV6	**CTGGT**TGT**GGGGGT**T**GC**T**T**TTC**A**T**G**TGCT**GC**GC**T**TGGTAT**G**TGAAGGG**CC**G**CGTT**GT**C**CCCG**CGTTTAC**CTACGC**GG**T**A**
	2371 2380 2390 2400 2410 2420 2430 2440 2449
H77 (NC_004102)	TACGGGATGTGGCCTCTCCTCCTGCTCCTGCTGGCGTTGCCTCAGCGGGCATACGCACTGGACACGGAGGTGGCCGCGT
HCV1	TACGGGATGTGGCCTCTCCTCCTGCTCCTGTTGGCGTTGCC**C**CA**A**CGGGCATACGC**G**CTGGACACGGAGGTGGCCGCGT
HCV2	**CT**CGG**CT**TGTGG**T**C**CTTT**CTCCT**C**CT**AG**T**CC**TGGC**CC**TGCC**A**CAGC**A**GGC**T**TA**T**GC**CT**TGGAC**G**C**C**G**CT**G**AACAA**G**G**G**G**
HCV3	**ACG**GG**TC**T**TT**GG**T**C**C**CT**AGCAT**TGCTC**G**T**CC**T**CTTGC**T**C**CC**C**CA**A**CGGGC**G**TA**T**GC**TTG**G**TCGGGT**GA**A**G**ACAG**CGC**TA**
HCV4	T**G**CGGGATGTGGCC**C**CT**G**CTCCT**C**CT**G**CT**CC**T**C**GCG**C**TGCC**CG**A**AA**GGGC**G**TACGC**GTTT**GAC**CG**GGAGGTGGC**A**G**G**GT
HCV5	T**TG**GG**C**AT**T**TGGCC**A**CT**A**CT**CT**T**A**CTCCT**TC**T**CCTCC**TGCC**C**CA**CA**GGGC**TCTG**GC**C**CTGGAC**T**C**AAGC**G**AT**G**G**CG**G**G**A**
HCV6	**CTGCA**GATGTGGCC**C**CTCCT**G**CTG**T**T**AG**T**CC**TGGC**C**TTGCCTCAGCGGGCATACGC**TA**TGGACA**AT**GAGC**A**GGC**G**GC**A**T
	2450 2460 2470 2480 2490 2500 2510 2520 2528
H77 (NC_004102)	CGTGTGGCGGCGTTGTTCTTGTCGGGTTAATGGCGCTGACTCTGTCGCCATATTACAAGCGCTACATCAGCTGGTGCAT
HCV1	CGTGTGGCGGCGTTGTTCTTGTCGGGTT**G**ATGGCGCTGACTCTGTC**A**CCATATTACAAGCGCTA**T**ATCAGCTGGTGC**T**T
HCV2	**AACTA**GG**GCTG**GT**CA**T**AT**TAGT**AATCA**T**ATCCATCT**T**T**ACTCT**TA**C**C**CCA**GCA**TACAAG**ATTCT**C**C**T**G**AGC**C**G**T**T**CAG**T
HCV3	C**TCTC**GGCG**CT**G**GG**GT**CT**T**G**GTC**CTC**TT**CGGCTTCTTT**AC**CT**TGTC**A**CC**T**T**GG**TA**T**AAGC**AT**T**GG**ATC**G**GC**C**G**CCT**CAT
HCV4	C**CCT**TGGCGGCG**GC**GT**CG**T**G**GTC**TTAC**T**G**A**CCATC**CTGAC**AT**TGTC**T**CCA**C**ATTACAAGC**A**CT**GGC**T**GGC**C**C**GG**G**G**A**AT
HCV5	C**TGTG**GG**TT**G**TC**T**C**GT**G**CT**AAC**C**ATTC**T**T**A**CAATCT**T**C**AC**A**CT**CA**C**C**CC**TGGG**TA**T**AAG**AAGATGG**T**AGTGCT**G**GT**CAT
HCV6	C**CCTC**GG**G**G**CT**GTTGTTCTTGTCG**TTA**T**C**A**CCATCT**T**C**ACC**C**T**CA**C**C**CC**CGC**TTACAAG**AAGCTGC**TCA**CAA**G**C**T**TG**AT

Table S5. *Cont.*

	2529 2540 2550 2560 2570 2580 2590 2600 2606
H77 (NC_004102)	GTGGTGGCTTCAGTATTTTCTGACCAGAGTAGAAGCGCAACTGCACGTGTGGGTTCCCCCCCTCAACGTCCGGGGGGG
HCV1	**A**TGGTGGCTTCAGTATTTTCTGACCAGAG**C**AGAAGCGCAACTGCACGTGTGGGTTCCCCCCCTCAACGTCCG**A**GGGGG
HCV2	GTGGTGGCT**GTCC**TA**CA**T**G**CTG**GT**C**TTG**G**CC**GA**G**GC**C**CA**GATT**CA**GCAA**TGGGTTCCCCCCCT**GG**A**G**G**C**CCG**A**GGGGG
HCV3	GTGGTGG**AAC**CAGTA**CACCA**T**ATGT**AGA**TGC**GA**G**GC**CGCC**CT**T**CA**A**GTGTGGGT**C**CCCCCCCT**ACTT**G**CA**CG**C**GGG**A**G
HCV4	GTGGTGG**T**T**G**CA**A**TA**C**TT**CA**T**AG**CCAG**G**G**CC**GA**G**GC**CATG**CTGCA**T**GT**C**T**AT**GTTCC**AT**C**AT**T**GG**A**G**GT**G**CG**C**GG**CCC**
HCV5	GTGGTGGCTTCAGTATTT**CA**T**AG**CC**C**G**G**GT**G**GA**G**GC**CATCA**T**C**CACGTGTGGGT**G**CCCCC**GT**T**GC**A**G**GT**TA**GGGG**T**GG
HCV6	**T**TGGTGG**AAC**CAGTATTT**CA**T**CG**C**AC**GAG**CT**GA**G**GC**CATG**CT**A**CACG**A**GTGGGT**G**CCC**T**CCCT**ACGG**GT**TA**GGGG**T**GG
	2607–2610 2620 2630 2640 2650 2660 2670 2680 2684
H77 (NC_004102)	GCGCGATGCCGTCATCTTACTCATGTGTGTTGTACACCCGACTCTGGTATTTGACATCACCAAACTACTCCTGGCCAT
HCV1	GCGCGA**C**GCCGTCATC**C**TACTCATGTGTGTTGTACACCCG**G**C**G**CTGGTATTTGACATCACCAAACT**G**CTGCTGGCC**G**T
HCV2	GCG**T**GA**C**G**GGA**TCATCT**GGGCGGCTGTCA**TT**C**TACACCC**ACGC**CT**T**GT**G**TTTGA**G**ATCAC**G**AAA**TGGT**TG**T**TGGC**A**AT
HCV3	**TA**G**G**GA**C**G**GT**GTCATC**C**T**G**CT**A**A**CAA**G**CC**T**GC**T**TT**A**T**CC**AT**CT**T**T**AA**T**T**TTTGACATCAC**T**AA**G**CT**G**CTG**A**T**A**GC**A**GT
HCV4	**T**CG**A**GA**CT**CCGTCATC**A**T**C**CTCA**C**G**GCCC**T**GT**T**C**CACCC**CCAC**CTGG**CC**TTTGACATCAC**A**AAA**TAC**CT**C**CTGGCCAT
HCV5	**T**CG**T**GATGC**TA**TCATC**A**T**G**CTCA**CA**TG**CC**T**CT**T**C**CACCC**TG**C**C**CTGG**GG**TTTGA**G**ATCAC**A**AAA**A**T**C**CT**C**CT**C**G**GG**AT
HCV6	**T**CG**G**GA**C**GCCGTCATC**C**TACTCA**CC**TG**C**TT**GT**TACA**T**CC**ACAG**CTGG**GG**TTTGA**GG**TCAC**T**AA**GA**T**C**CTGCT**A**GC**T**AT
	2685 2690 2700 2710 2720 2730 2740 2750 2762
H77 (NC_004102)	CTTCGGACCCCTTTGGATTCTTCAAGCCAGTTTGCTTAAAGTCCCCTACTTCGTGCGCGTTCAAGGCCTTCTCCGGAT
HCV1	CTTCGGACCCCTTTGGATTCT**C**CAAGCCAGTTTGCTTAAAGT**G**CCCTACTTCGTGCGCGTTCAAGGCCTTCTCCGGAT
HCV2	C**C**T**G**GG**G**CC**TGCC**T**ACC**T**C**CTT**A**AAGC**GTC**T**C**TGCT**ACGG**GT**G**CC**A**TACTT**T**GTG**A**G**G**G**C**TCA**C**G**CT**CT**G**CT**A**CG**AG**T
HCV3	**A**TT**G**GG**C**CC**AT**T**A**T**ACT**T**AA**T**A**CA**G**GC**TGCCA**T**CAC**TA**CCAC**CCCCTACTT**T**GTGCG**T**G**CG**CA**T**G**TA**CT**GG**TCCG**CC**T
HCV4	C**C**TTGG**C**CCCCT**C**T**AC**AT**A**CT**C**CA**G**GCC**TCAC**TGCT**GCGC**GTCCC**T**TACTT**T**GTG**A**G**G**G**C**TCA**C**G**CG**CT**AA**TC**AA**GAT
HCV5	**AC**T**G**GG**C**CC**TT**T**G**T**ACC**T**G**CT**G**CA**GCATTCGC**T**CACC**AA**GC**T**G**CC**T**T**TACTTC**A**T**CA**G**G**G**CG**C**GC**G**C**CCT**G**CT**GA**GG**C**T
HCV6	C**C**T**G**GG**C**CC**T**CT**G**T**AC**AT**C**CT**C**CA**GTA**CAG**C**TTGCT**C**AA**G**GT**G**CC**T**TACTT**T**GTGCGCG**CA**CA**CATA**CT**C**CT**G**CG**CGC**

Table S5. *Cont.*

	2763 2770 2780 2790 2800 2810 2820 2830 2840
H77 (NC_004102)	CTGCGCGCTAGCGCGGAAGATAGCCGGAGGTCATTACGTGCAAATGGCCATCATCAAGTTAGGGGCGCTTACTGGCAC
HCV1	CTGCGCGCTAGCGCGGAAGAT**G**GCCGGAGG**C**CATTACGTGCAAATGGCCATCATCAAGTT**G**GGGGCGCTTACTGGCAC
HCV2	**G**TGC**A**C**C**CT**G**G**T**G**A**G**AC**A**CC**T**C**GC**A**GGAG**C**T**AGG**TAC**A**T**C**CA**G**ATG**CTGC**T**G**ATCA**CCA**T**T**GG**CAG**G**TGG**AC**C**GGCAC
HCV3	**T**TGC**AT**GCT**C**G**T**GCG**CTCCG**T**GATG**GG**G**GG**AA**A**A**TAC**T**T**C**CA**G**ATGG**T**CAT**AC**T**G**A**GCA**T**T**GG**CAGATGGTTCAA**CAC
HCV4	CTGC**AGC**CT**G**G**T**GCG**CGGGG**T**G**G**TGTAT**GG**CA**A**G**TAC**TGC**CAAATGGCC**C**T**AC**TCAAG**G**T**G**GGGGC**C**CT**G**ACTGGCAC
HCV5	**G**TGC**CTA**CTAGC**AAA**G**C**A**CC**T**G**GCC**TAT**GG**CA**A**G**TACGTGCA**GGC**GGCC**T**T**GC**TC**C**A**CC**T**T**GG**TAG**GCT**G**AC**C**GG**A**AC
HCV6	**T**TGC**AT**GCT**T**G**TC**CG**T**A**GGC**TAGC**A**GG**G**GGT**A**A**G**TACGTGCA**GGC**G**TT**C**C**T**TC**T**G**A**G**G**C**T**G**GG**C**GC**TTGG**ACTGGCAC
	2841 2850 2860 2870 2880 2890 2900 2910 2918
H77 (NC_004102)	CTATGTGTATAACCATCTCACCCCTCTTCGAGACTGGGCGCACAACGGCCTGCGAGATCTGGCCGTGGCTGTGGAACC
HCV1	CTATGT**T**TATAACCATCTCAC**T**CCTCTTCG**G**GACTGGGCGCACAACGGCCT**A**CGAGATCTGGCCGTGGCTGT**A**GA**G**CC
HCV2	**T**TA**CA**T**C**TAT**G**ACCA**C**CTC**T**CCCCT**A**T**GTC**A**ACT**TGGGC**AGC**C**C**A**G**GG**TT**TGCG**G**GA**C**CTGGC**A**GT**C**GC**C**GTGGA**G**CC
HCV3	CTA**CC**T**A**TA**CG**ACCA**C**CT**AG**C**G**CC**AA**T**G**C**A**A**C**A**T**TGGGCC**GCAGCT**GGCCT**CAA**AGA**C**CT**A**GC**A**GTGGC**CACT**GAACC
HCV4	**A**TA**CA**T**C**TAT**G**ACCA**C**CTCAC**T**CC**CT**T**GTC**AGACTGGGCC**GC**C**G**ACGGCCT**TAAG**GA**C**CTGGC**G**GTGGC**CC**T**T**GA**G**CC
HCV5	**G**TA**CA**T**T**TAT**G**ACCA**C**CT**TG**CCCC**CA**T**GAAG**GA**T**TGGGC**AGCGTCT**GG**G**CTGCG**C**GA**C**TT**A**GC**G**GTGGC**CACA**GA**G**CC
HCV6	CTA**CA**T**C**TAT**G**ACCATCTC**G**CCCC**C**CTT**TCT**GACTGGGC**TAG**C**G**ACGGC**T**TGCG**C**GATCTGGCCGT**T**GC**A**GT**T**GA**G**CC
	2919 2930 2940 2950 2960 2970 2980 2990 2996
H77 (NC_004102)	AGTCGTCTTCTCCCGAATGGAGACCAAGCTCATCACGTGGGGGGCAGATACCGCCGCGTGCGGTGACATCATCAACGG
HCV1	AGTCGTCTTC**T**CCC**A**AATGGAGACCAAGCTCATCACGTGGGGGGCAGA**C**ACCGCCGCGTGCGGTGACATCATCAACGG
HCV2	**T**GT**G**GT**G**TTCA**G**CC**C**AATGGAGA**AG**AAG**G**TCAT**TGT**GTGGGGGGC**T**GA**G**AC**A**G**TG**GC**A**TG**T**GG**G**GACATC**C**T**GC**A**T**GG
HCV3	**T**GT**AA**T**A**TT**T**A**GT**C**CC**ATGGA**A**A**T**CAAG**G**TCATCAC**C**TGGGG**C**GC**G**GA**C**AC**A**GC**G**GC**T**TGCGG**A**GA**T**AT**TC**T**TTG**CGG
HCV4	AGTC**A**T**A**TTCAC**G**C**CC**ATGGAGA**AG**AAG**G**TGAT**A**AC**C**TGGGG**C**GC**T**GA**C**AC**T**GC**T**GCGTGCGGTGACATCATCAA**G**GG
HCV5	**CA**TC**A**T**A**TTC**T**CCG**CT**ATGGAGAC**G**AAG**G**TCATCACGTGGGGGGC**T**GA**C**AC**G**GCCGCGTG**T**GG**G**GACAT**AC**T**TGCT**GG
HCV6	**G**GTC**A**T**T**TTC**T**C**T**C**CC**ATGGAGA**AG**AAA**G**TCATCAC**C**TGGGG**T**GC**T**GA**C**AC**T**GCCGCGTGCGGTGACATC**C**T**G**A**CT**GG

Table S5. *Cont.*

	2997–3000 3010 3020 3030 3040 3050 3060 3070 3074
H77 (NC_004102)	CTTGCCCGTCTCTGCCCGTAGGGGCCAGGAGATACTGCTTGGGCCAGCCGACGGAATGGTCTCCAAGGGGTGGAGGTT
HCV1	CTTGCCCGTCTC**C**GCCCGTAGGGGCC**G**GGAGATACTGCT**C**GG**A**CC**G**GCCGA**T**GGAATGGTCTCCAAGGGGTGGAGGTT
HCV2	C**C**T**C**CC**G**GT**T**TC**C**GC**GA**G**GCTA**GG**TAG**GGA**AG**T**T**CTGCT**C**GG**C**CC**T**GCCGA**T**GG**CTACAC**CTC**G**AAGGGGTGGA**A**G**C**T
HCV3	**GC**TGCCCGTCTCTGC**G**CG**ATTA**GGCC**GT**GAG**G**T**GT**TG**T**T**G**GG**A**CC**T**GC**T**GA**T**G**ACTATCGGGAG**A**T**GGG**T**TGG**C**G**CC**T
HCV4	C**C**TGCC**G**GTCTC**G**GC**TA**G**GCTG**GGC**A**A**T**GAGAT**CT**TGCT**C**GG**C**CC**G**GC**T**GAC**ACTGA**GG**CGG**C**GGG**GGGGTGGAGG**C**T
HCV5	C**C**T**T**CC**G**GT**A**TC**A**GC**TA**G**AC**GGGGCC**GC**GA**A**AT**TT**T**C**CT**G**GGGCC**G**GCCGACG**AC**AT**CAAGAAGGC**GGG**C**TGG**C**G**AC**T
HCV6	C**C**T**C**CC**T**GT**G**TC**A**GC**TA**G**G**A**A**GGG**GA**A**CCT**GGT**G**CT**A**CT**G**GG**A**CC**C**GC**T**GA**T**G**A**T**AT**G**AAGGG**C**GG**GGG**T**TGGAGG**C**T
	3075 3080 3090 3100 3110 3120 3130 3140 3152
H77 (NC_004102)	GCTGGCGCCCATCACGGCGTACGCCCAGCAGACGAGAGGCCTCCTAGGGTGTATAATCACCAGCCTGACTGGCCGGGA
HCV1	GCTGGCGCCCATCACGGCGTACGCCCAGCAGAC**A**AG**G**GGCCTCCTAGGGTG**C**ATAATCACCAGCCTGAC**A**GGCCGGGA
HCV2	**C**CT**A**GC**T**CCCATCAC**T**GC**T**TAC**ACT**CAGCAGAC**TC**G**T**GG**T**CTCCT**G**GG**TGCC**AT**CG**T**GGT**CAGCCT**A**AC**G**GGCCG**C**GA
HCV3	G**T**TGGC**C**CC**G**ATCAC**A**GC**A**TACGCCCAGCA**A**AC**T**AG**G**GGCCT**T**CT**T**GGG**AC**TAT**TG**T**G**ACCAGC**T**TGACTGGC**A**GGGA
HCV4	**C**CT**T**GC**C**CCCATCAC**C**GCGTACGC**G**CAGCAGAC**CC**GAGGC**T**T**GT**T**T**GG**CACC**AT**CG**T**G**AC**G**AGCCT**C**AC**C**GGC**A**G**A**GA
HCV5	**T**CT**C**GC**C**CC**T**ATCAC**C**GCGTA**T**GC**G**CAGCAGACG**C**GAGG**GG**T**A**CT**G**GG**CGC**TATA**G**TC**GT**CAGCCT**A**AC**C**GGCCGGGA
HCV6	**T**CTGGC**T**CCCATCAC**C**GCGTA**T**GC**G**CAGCAGACGAG**G**GGCCT**AG**T**C**GG**CACC**AT**TG**TCACCAGCCT**A**AC**C**GGCCG**T**GA
	3153 3160 3170 3180 3190 3200 3210 3220 3230
H77 (NC_004102)	CAAAAACCAAGTGGAGGGTGAGGTCCAGATCGTGTCAACTGCTACCCAAACCTTCCTGGCAACGTGCATCAATGGGGT
HCV1	CAAAAACCA**G**GTGGAGGGTGAGGTCCAGAT**T**GTGTCAACTGCT**G**CCCAAAC**T**TTCCTGGCAAC**C**TGCATCAA**C**GGGGT
HCV2	CAAAAA**TG**A**GCA**GG**CT**GG**GC**AGGTCCAG**G**T**TC**TGTC**CT**C**C**G**TC**AC**A**CAA**T**C**T**TTC**T**TGG**GG**AC**A**T**CT**AT**TTCG**GGGGT
HCV3	**T**AA**G**AAC**GTG**GTG**ACC**GGTGA**A**GT**G**CAG**GT**G**C**TT**T**CT**A**C**G**GCTACCCA**G**ACCTTCCT**A**G**GT**AC**AACAG**T**GGGG**GGGGT
HCV4	CA**CC**AA**TG**A**GAACTGT**GGTGAGGTCCAG**G**T**GC**TGTC**C**AC**G**GC**C**AC**G**CA**GT**CCTTC**T**TGG**GT**AC**TGCG**ATCAATGG**C**GT
HCV5	CAAAAA**TG**AAG**CC**GAGGGTGAGGT**G**CAG**G**TC**C**T**A**TC**C**AC**G**GC**A**AC**A**CAAAC**A**TT**T**CT**T**G**GC**AC**T**T**C**CATCAATGGGGT
HCV6	CAA**G**AA**TG**A**G**GT**A**GA**A**GG**G**GAGGT**A**CAG**G**T**G**GT**C**TC**C**AC**G**GC**C**ACCCA**GT**CCTTCCTGGC**G**AC**C**T**C**C**G**TCAA**C**GG**T**GT

Table S5. *Cont.*

	3231 3240 3250 3260 3270 3280 3290 3300 3308
H77 (NC_004102)	ATGCTGGACTGTCTACCACGGGGCCGGAACGAGGACCATCGCATCACCCAAGGGTCCTGTCATCCAGATGTATACCAA
HCV1	**G**TGCTGGACTGTCTACCACGGGGCCGGAAC**A**AGGACCATCGCATCACCCAAGGGTCCTGTCATCCAGATGTA**C**ACCAA
HCV2	**CCT**CTGGAC**A**GT**A**TACCACGGGGC**T**GG**T**A**AC**A**A**GACC**T**T**G**GC**TGGC**CCCAA**A**GG**A**CC**A**GTCA**CT**CAGATGTA**C**ACCA**G**
HCV3	**TATG**TGGACTGT**T**TACCA**T**GG**T**GC**A**GG**TT**C**A**AGGAC**AC**T**T**GC**GGGCG**CCAA**ACA**TCCTG**CGC**TCCA**A**ATGTA**C**AC**A**AA
HCV4	**CATG**TGGACTGT**G**TACCA**T**GGGGC**G**GG**C**A**GC**A**A**GACCATC**AGCGGC**CC**G**AA**A**GG**A**CCTGTCA**A**CCA**A**ATGTA**C**ACCAA
HCV5	A**ATG**TGGAC**A**GT**CTT**CCACGGGGCCGG**CT**C**T**A**A**GACC**C**T**T**GC**TGGC**CCCAA**A**GG**C**CC**A**GT**AG**T**G**CA**A**ATGTA**C**ACCAA
HCV6	**CCTG**TGGACTGT**T**TA**T**CA**T**GGGGCCGG**TT**C**A**A**A**GAC**TC**T**G**GC**TGG**ACC**G**AA**A**GG**A**CC**A**GT**GTG**CCAGATGTA**C**ACCAA
	3309 3320 3330 3340 3350 3360 3370 3380 3386
H77 (NC_004102)	TGTGGACCAAGACCTTGTGGGCTGGCCCGCTCCTCAAGGTTCCCGCTCATTGACACCCTGCACCTGCGGCTCCTCGGA
HCV1	TGT**A**GACCAAGACCT**C**GTGGGCTGGCCCGCTCC**C**CAAGGT**G**CCCGCTCATTGACACCCTGCACCTGCGGCTCCTCGGA
HCV2	**C**G**CA**GA**GGGG**GACCT**C**GTGGG**A**TGGCC**TAGC**CC**C**C**CC**GG**GA**C**TAAG**TCATT**AGAC**CCCTG**T**ACCTGCGG**GG**CC**GT**GGA
HCV3	TGT**A**GA**T**CA**G**GACCT**C**GT**T**GG**G**TGGCC**A**GC**C**CCTC**C**AGG**GG**C**TAAG**TC**TC**T**TGA**ACC**G**TGCACCTGCGG**G**TC**TG**C**A**GA
HCV4	TGT**T**GACCAAGACCT**A**GTGGG**A**TGGCC**A**GC**C**CC**C**C**CG**GG**GGT**C**AAG**TC**TC**TG**G**C**G**CC**G**TGCACCTGCGGC**G**C**A**TCGGA
HCV5	TGT**A**GAC**A**AAGACCT**G**GTGGG**A**TGGCC**TT**C**C**CC**C**C**CC**GG**AA**C**G**CGCTC**GC**T**C**AC**T**CC**G**TG**T**AC**T**TGCGG**A**TC**GG**CGGA
HCV6	TGTGGACCA**G**GACCT**G**GT**A**GG**A**TGGCC**A**GCTCC**C**C**CG**GG**AG**C**AA**G**G**TC**GC**T**C**ACACC**A**TGCAC**T**TG**T**GGCTC**TAGT**GA
	3387 3390 3400 3410 3420 3430 3440 3450 3460 3464
H77 (NC_004102)	CCTTTACCTGGTCACGAGGCACGCCGATGTCATTCCCGTGCGCCGGCGAGGTGATAGCAGGGGTAGCCTGCTTTCGCC
HCV1	CCTTTACCTGGTCACGAGGCACGCCGATGTCATTCCCGTGCGCCGGCGGGGTGATAGCAGGGGCAGCCTGCTTTCGCC
HCV2	CCT**C**TACCTGGTCAC**CC**G**AA**ACGC**T**GATGTCATTCC**G**GT**C**CG**GA**GG**AAA**G**A**TGA**CC**G**GC**GGGG**TGCA**CT**A**CT**C**TCGCC
HCV3	C**T**T**A**TAC**T**TGGT**T**AC**CC**G**CG**A**T**GC**T**GATGTCAT**C**CC**T**G**CT**CG**G**CG**CA**GGGG**G**GA**CTC**CA**CA**G**CG**AGC**T**TGCT**CAGT**CC
HCV4	CCT**G**T**T**CCTGGT**T**AC**C**AGGCACGC**A**GA**C**GT**GG**T**G**CCCGTGCGC**A**GG**A**GGGG**C**GA**C**A**C**C**C**GGGGC**GC**CCT**C**CT**GAGC**CC
HCV5	**T**CT**G**TACCTGGT**T**AC**C**AGGCA**T**GC**A**GA**C**GTCATTCCCG**CC**CCG**TA**G**A**CGGGG**C**GA**C**A**CTC**G**C**G**C**C**TC**CCTGCT**CAGC**CC
HCV6	CCT**C**TA**T**CTGGTCACGAGG**A**A**T**GCCGATGTCAT**C**CC**T**G**CAA**G**G**CG**CA**GGGGTGA**C**A**A**C**C**G**T**G**CTGC**CCT**C**CT**CAGT**CC

Table S5. *Cont.*

	3465 3470 3480 3490 3500 3510 3520 3530 3542
H77 (NC_004102)	CCGGCCCATTTCCTACTTGAAAGGCTCCTCGGGGGGTCCGCTGTTGTGCCCCGCGGGACACGCCGTGGGCCTATTCAG
HCV1	CCGGCCCAT**C**TCCTACTTGAAAGGCTCCTCGGGGGGTCCGCTGCTGTGCCCCGCGGGACACGCCGTGGGC**A**TATTCAG
HCV2	**AA**GGCC**TC**T**C**TC**AAC**C**C**T**C**AAAGG**A**TC**A**TC**C**GG**C**GG**A**CC**CG**TG**C**T**C**TGCCC**TAG**GGGACACGCCGTGGGC**T**T**G**TTCAG
HCV3	**TA**GGCC**TC**T**CG**CCT**GTC**T**C**AAAGG**T**TCCTC**T**GG**A**GGTCC**TG**T**TA**TGTGCCC**TT**CGGG**G**CA**T**G**TT**G**C**GGG**GA**T**C**TT**T**AG
HCV4	C**A**GGCC**A**AT**C**TCC**AC**C**C**T**C**AA**G**GG**A**TCCTC**T**GG**C**GGTCCGCTGCTGTGCCCC**CT**GGGACACGCCGT**C**GGC**A**TATTC**C**G
HCV5	**GA**G**A**CCCAT**CAGT**TA**TC**T**C**AA**G**GG**T**TCCTCGGG**C**GG**C**CCG**G**T**CA**TGTGCCC**TT**C**C**GG**G**CA**T**G**TG**GT**A**GG**TG**T**T**TTCAG
HCV6	**A**CGGCCCAT**AAG**C**AC**C**C**TGAAAGG**G**TCCTCGGG**A**GG**C**CC**CA**TGCTGTGCCCC**T**CGGG**C**CACG**TT**GTGGG**A**CT**C**TTC**C**G
	3543 3550 3560 3570 3580 3590 3600 3610 3620
H77 (NC_004102)	GGCCGCGGTGTGCACCCGTGGAGTGGCTAAGGCGGTGGACTTTATCCCTGTGGAGAACCTAGAGACAACCATGAGATC
HCV1	GGCCGCGGTGTGCACCCGTGGAGTGGCTAAGGCGGTGGACTTTATCCC**C**GTGGAGA**C**CCTAGAGACAACCATGAG**G**TC
HCV2	**A**GC**G**GC**C**GTGTGC**T**CC**A**G**G**GG**T**GTGGC**C**AA**AT**C**CA**T**T**GACTT**C**ATCCCTGT**T**GAG**TCT**CT**C**GA**C**A**TCG**CCA**CAC**G**G**TC
HCV3	GGC**T**GC**T**GTGTGCACC**A**G**A**GG**T**GT**A**GC**A**AA**A**GC**CC**T**AC**A**G**TT**C**AT**A**CC**A**GTGGA**A**A**C**CCT**TAGC**ACA**CAGGCT**AG**G**TC
HCV4	**A**GCCGCGGTGTGCACCCG**G**GG**C**GTGGCTAA**A**GC**A**GTGGACTT**CG**T**G**CC**G**GT**T**GAG**TCT**CT**T**GA**A**AC**C**ACCATGAG**G**TC
HCV5	GGC**T**GC**C**GTGTGCAC**G**CG**G**GG**T**GT**C**GC**G**AAGGCG**C**T**C**GA**G**TT**C**ATCCC**G**GT**C**GA**A**AACCT**G**GAGAC**C**AC**G**ATG**C**G**C**TC
HCV6	**C**GC**T**GC**C**GT**A**TGCAC**AA**G**G**GG**T**GTGGC**A**AA**AT**C**CC**T**T**GA**T**TTT**G**TCCC**A**GTGGAGAAC**A**T**G**GAGAC**C**ACCATG**C**G**C**TC
	3621 3630 3640 3650 3660 3670 3680 3690 3697
H77 (NC_004102)	CCCGGTGTTCACGGACAACTCCTCTCCACCAGCAGTGCCCCAGAGCTTCCAGGTGGCCCACCTGCATGCTCCCACCG
HCV1	CCCGGTGTTCACGGACAACTCCTCTCCACCAGCAGTGCCCCAGAGCTTCCAGGTGGCCCACCTGCATGCTCCCACCG
HCV2	**G**CC**CAGT**TTC**T**C**T**GACAAC**AG**C**A**C**G**CCACCAGC**T**GTGCCCCAGA**C**CT**A**CCAGGTGG**G**C**T**AC**T**TGCATGC**A**CC**A**AC**A**G
HCV3	**T**CC**ATCT**TTC**T**C**T**GACAA**T**TC**AA**CTCC**T**CC**T**GC**T**GT**C**CC**A**CAGAGCT**AT**CA**A**GT**A**G**GGT**ACCT**T**CATGC**C**CC**G**ACCG
HCV4	CCCGGT**C**TTCAC**T**GACAACTCC**A**C**G**CC**C**CC**T**GC**T**GTGCCCCAGA**C**CT**A**CCAGGT**C**GCCCAC**T**TGCA**C**GC**A**CC**G**AC**G**G
HCV5	**G**CC**T**GTGTTCAC**T**GACAAC**AG**C**A**C**A**CC**C**CC**T**GC**G**GT**C**CC**T**CA**TGAG**TTCCA**A**GTGG**GG**CACCT**C**CATGC**G**CCCACCG
HCV6	**T**CC**CTCC**TTCAC**A**GACAACTCC**A**C**G**CC**G**CC**T**GC**T**GTGCCCCAGA**C**CT**A**CCAGGTGG**GGT**ACCT**C**CA**C**GC**A**CC**A**AC**A**G

Table S5. *Cont.*

	3698–3700 3710 3720 3730 3740 3750 3760 3770 3774
H77 (NC_004102)	GCAGCGGTAAGAGCACCAAGGTCCCGGCTGCGTACGCAGCCCAGGGCTACAAGGTGTTGGTGCTCAACCCCTCTGTT
HCV1	GCAGCGG**C**AAGAGCACCAAGGTCCCGGCTGC**A**TACGCAGCCCAGGGCTACAAGGTG**C**T**A**GTGCTCAACCCCTC**C**GTT
HCV2	GCAGCGG**G**AAGAGCACCAAGGTCCC**T**GC**C**GC**A**TA**T**GC**CAGT**CAGGG**G**TA**T**AA**A**GT**AC**T**C**GT**A**CT**A**AA**T**CCCTCTGT**C**
HCV3	GCAGCGGTAAGAGCAC**A**AAGGTCCCGGC**C**GC**T**TA**T**G**T**AGC**A**CA**A**GG**A**TA**T**AA**T**GT**TC**T**C**GTG**T**T**G**AA**T**CC**A**TC**G**GT**G**
HCV4	G**G**AGCGG**C**AAGAGCACCAA**A**GTCCCGGC**C**GCGTA**T**GC**G**GCCCAGGGCTACAAGGTG**C**T**A**GTGCTCAACCCCTC**G**GTT
HCV5	G**G**AGCGG**G**AAGAGCAC**G**AAGGT**A**CC**C**GCTGC**T**TACGC**G**GCCCA**A**GG**G**TACAAGGTG**C**TGGTGCT**A**AACCC**G**TC**C**GT**C**
HCV6	GCAGCGG**G**AAGAGCACCAAGGTCCCGGC**A**GCGTA**T**GC**T**GC**T**CAGGGCTACAAGGTG**C**TGGTGCT**G**AACCC**A**TC**G**GT**G**
	3775 3780 3790 3800 3810 3820 3830 3840 3851
H77 (NC_004102)	GCTGCAACGCTGGGCTTTGGTGCTTACATGTCCAAGGCCCATGGGGTTGATCCTAATATCAGGACCGGGGTGAGAAC
HCV1	GCTGCAAC**A**CTGGGCTTTGGTGCTTACATGTCCAAGGCCCATGGG**A**T**C**GATCCTAA**C**ATCAGGAC**T**GGGGTGAG**G**AC
HCV2	GC**G**GC**C**AC**A**CT**T**GG**T**TTTGG**G**GC**C**TACATGTCCAA**A**GCCCA**C**GGG**A**T**CA**A**C**CC**C**AA**C**ATCAG**A**ACCGG**A**GT**AC**G**G**AC
HCV3	GC**G**GC**C**AC**A**CT**A**GGCTT**C**GG**CT**CTT**T**CATGTC**GCGT**GCC**T**ATGGG**A**T**C**GA**C**CC**C**AA**C**ATC**C**G**C**AC**T**GGG**AACC**G**C**AC
HCV4	GCTGC**G**AC**A**CTGGGCTTTGG**G**GC**A**TACATGTCCAAGGC**G**CATGG**CA**T**C**GA**C**CC**G**AA**C**AT**AC**GG**T**C**A**GG**T**GT**C**AG**G**AC
HCV5	GC**A**GC**G**ACGCT**C**GG**G**TT**C**GG**G**GC**A**TACATGTC**A**A**GA**GC**AT**ATGG**C**GT**G**GA**C**CC**C**AA**C**ATCAGGACCGG**A**GT**T**AG**G**AC
HCV6	GC**G**GC**C**ACGCT**T**GGCTTTGG**C**GCTTA**T**ATG**AGT**AA**A**GC**T**CATGG**CA**T**A**GA**C**CC**G**AA**C**ATC**C**GGACCGGGGT**C**AG**G**AC
	3852 3860 3870 3880 3890 3900 3910 3920 3928
H77 (NC_004102)	AATTACCACTGGCAGCCCCATCACGTACTCCACCTACGGCAAGTTCCTTGCCGACGGCGGGTGCTCAGGAGGTGCTT
HCV1	AATTACCACTGGCAGCCCCATCACGTACTCCACCTACGGCAAGTTCCTTGCCGACGGCGGGTGCTCAGG**G**GGTGCTT
HCV2	**TG**T**G**ACCAC**C**GG**GGA**CCCCATCAC**C**TACTCCAC**T**TA**T**GGCAAGTT**T**CT**C**GC**A**GA**T**GG**A**GG**C**TGCTCAG**CT**GG**C**GC**C**T
HCV3	**CG**TTAC**A**ACTGG**TGCTAAAC**T**G**AC**C**TA**T**TCCACCTACGG**T**AAGTT**T**CT**C**GC**G**GACGG**G**GG**T**TGCTC**C**GG**G**GG**A**GC**A**T
HCV4	**C**AT**C**ACCAC**A**GG**CGCG**CC**T**ATCAC**A**TACTCCACCTACGG**G**AAGTTCCT**G**GCCGA**T**GG**A**GG**T**TGC**GGG**GGAGG**A**GC**G**T
HCV5	**TG**T**C**ACCAC**C**GG**AGCTG**C**T**ATCAC**A**TACTC**T**AC**T**TA**T**GGCAAGTTCCT**C**GC**T**GACGG**G**GGGTGCTCAGG**C**GG**C**GC**G**T
HCV6	**C**AT**C**ACCAC**A**GG**CG**GC**G**C**T**ATCAC**C**TACTCCAC**A**TA**T**GG**G**AA**A**TTCCT**G**GCCGA**T**GG**G**GG**A**TG**T**TC**T**GG**G**GG**G**GC**G**T

Table S5. *Cont.*

	3929 3940 3950 3960 3970 3980 3990 4000 4005
H77 (NC_004102)	ATGACATAATAATTTGTGACGAGTGCCACTCCACGGATGCCACATCCATCTTGGGCATCGGCACTGTCCTTGACCAA
HCV1	ATGACATAATAATTTGTGACGAGTGCCACTCCACGGATGCCACATCCATCTTGGGCATCGGCACTGTCCTTGACCAA
HCV2	ATGACAT**C**AT**C**AT**A**TG**C**GA**T**GA**A**TGCCA**T**TC**AGT**GGA**C**GC**T**AC**TA**CCATC**C**T**T**GGCAT**T**GG**A**AC**A**GTCCTTGACCA**G**
HCV3	ATGA**TG**T**G**AT**T**AT**C**TGTGA**T**GA**A**TG**T**CA**TG**CC**CAA**GA**C**GC**T**AC**TAG**CAT**A**TTGGG**T**AT**A**GGCAC**G**GTC**T**T**A**GA**T**CA**G**
HCV4	ATGACAT**C**AT**C**AT**C**TGTGACGAGTGCCA**T**TCCAC**T**GAT**T**CCACA**A**C**G**ATC**C**T**T**GGCAT**A**GGCAC**G**GTCCT**G**GACCAA
HCV5	ATGAC**G**T**G**AT**C**AT**A**TG**C**GACGAGTGCCA**T**TCC**CA**GGA**C**GC**T**AC**CA**CCATC**C**T**T**GG**G**AT**A**GGCAC**A**GTCCTTGACCA**G**
HCV6	ATGACAT**C**AT**C**AT**C**TGTGACGAGTGCCACTC**A**AC**A**GA**CC**C**T**AC**CA**C**GG**TC**C**TGGGCAT**A**GGCAC**G**GT**T**CT**C**GACCA**G**
	4006 4010 4020 4030 4040 4050 4060 4070 4082
H77 (NC_004102)	GCAGAGACTGCGGGGGCGAGACTGGTTGTGCTCGCCACTGCTACCCCTCCGGGCTCCGTCACTGTGTCCCATCCTAA
HCV1	GCAGAGACTGCGGGGGCGAGACTGGT**C**GTGCTCGCCAC**C**GCTACCCCTCCGGGCTCCGTCAC**C**GTG**C**CCCATCCTAA
HCV2	GC**T**GAGAC**C**GC**A**GG**T**G**TC**AG**G**CT**A**GT**G**GT**TT**T**G**GCCAC**A**GC**C**AC**G**CCTCC**C**GG**TA**C**G**GT**G**AC**AACTC**CCCA**CA**C**C**AA
HCV3	GC**T**GAGAC**G**GC**T**GGGG**T**GAG**G**CTG**ACG**GT**TT**T**A**GC**G**AC**A**GC**A**AC**T**CC**C**CC**A**GGC**AG**C**A**TCACTGTG**C**C**A**CAT**T**CTAA
HCV4	GC**G**GAGAC**C**GC**T**GG**A**GCG**C**G**C**CT**T**GT**C**GTGCTCGC**G**AC**C**GC**C**AC**G**CC**A**CC**A**GG**G**TC**G**GT**G**AC**AACCC**CCCATCC**C**AA
HCV5	GCAGAGAC**G**GC**T**GG**A**GC**T**AG**G**CT**C**GT**C**GT**CT**T**G**GCCAC**G**GC**C**AC**T**CC**C**CC**C**GGC**AGT**GT**G**AC**AAC**G**C**CCCA**C**CC**C**AA
HCV6	GC**G**GAGACTGC**C**GG**A**G**T**G**C**G**C**CT**TAC**TGTGCTCGC**A**AC**A**GC**A**AC**G**CC**G**CC**T**GG**T**TC**T**GTCACTGT**CC**CCCATCCTAA
	4083 4090 4100 4110 4120 4130 4140 4150 4159
H77 (NC_004102)	CATCGAGGAGGTTGCTCTGTCCACCACCGGAGAGATCCCTTTTTACGGCAAGGCTATCCCCCTCGAGGTGATCAAGG
HCV1	CATCGAGGAGGTTGCTCTGTCCACCACCGGAGAGATCCCCTTTTACGGCAAGGCTATCCCCCTCGAGG**CA**ATCAAGG
HCV2	CAT**A**GAGGAGGT**G**GC**C**CT**CGGTCATGAG**GG**C**GAGATCCCCTTTTA**T**GGCAAGGCTAT**T**CCCCT**A**G**CTTAC**ATCAAGG
HCV3	CATCGA**A**GA**A**GT**G**GC**C**CTG**GG**C**T**C**TGAA**GG**T**GAGATCCC**T**TT**C**TACGG**T**AAGGCTAT**A**CC**GA**T**A**G**CCC**TGCTCAAGG
HCV4	CAT**A**GAGGAGGT**C**GC**C**CTG**C**C**G**AC**G**AC**G**GGAGAGAT**A**CCCTT**C**TACGGCA**G**GGC**G**ATCCCCCT**A**G**CT**GT**C**ATCAAGG
HCV5	CATCGAGGAGGT**G**GC**C**CTG**C**C**TT**C**GGAG**GG**G**GA**A**ATCCCCTT**C**TACGGCA**G**GGC**C**ATCCCCCT**T**G**CTC**T**T**AT**A**AAGG
HCV6	CAT**AACA**GAG**ACA**GC**C**CT**CC**C**T**AC**T**AC**G**GGAGA**A**AT**A**CCCTTTTA**T**GG**G**AAGGC**A**ATCCCCCT**T**GAG**TAC**ATCAA**A**G

Table S5. *Cont.*

	4160 4170 4180 4190 4200 4210 4220 4230 4236
H77 (NC_004102)	GGGGAAGACATCTCATCTTCTGCCACTCAAAGAAGAAGTGCGACGAGCTCGCCGCGAAGCTGGTCGCATTGGGCATC
HCV1	GGGG**G**AGACATCTCATCTTCTGCCACTCAAAGAAGAAGTG**T**GACGAGCTCGCCGC**A**AAGCTGGTCGCA**C**TGGGCATC
HCV2	GGGG**C**AGACA**C**CT**G**ATCTT**T**TGCCA**T**TCAAAGAAGAAGTGCGACGAGCTCGC**A**GC**AGCC**CT**TCGG**G**GCA**TGGG**TG**TC
HCV3	GGGG**G**AG**G**CA**C**CT**T**ATCTT**T**TGCCA**T**TC**C**AAGAA**A**AA**A**TG**T**GA**T**GAG**A**T**A**GC**AT**C**C**AA**A**CT**CAGA**G**GCA**TGGG**GC**TC
HCV4	GGGG**G**AGACA**C**CTCATCTTCTG**T**CA**T**TCAAAGAAGAAGTG**T**GACGAGCT**G**GCC**AA**G**C**AGCTG**TCAT**C**TC**T**T**GGC**C**TC
HCV5	G**C**GG**T**AG**G**CATCTCATCTTCTGCCACTC**T**AAGAA**A**AA**A**TG**T**GA**T**GA**A**CT**T**GCC**AA**G**C**A**AT**TG**AC**C**AGCCA**GGGC**G**T**G**
HCV6	GGGGAAGACATCTCAT**A**TT**T**TGCCACTCAAAGAAGAAGTGCGACGAGCT**G**GCC**AA**G**C**A**A**CTG**ACAT**CA**C**T**T**GGC**TTA**
	4237 4240 4250 4260 4270 4280 4290 4300 4313
H77 (NC_004102)	AATGCCGTGGCCTACTACCGCGGTCTTGACGTGTCTGTCATCCCGACCAGCGGCGATGTTGTCGTCGTGTCGACCGA
HCV1	AATGCCGTGGCCTACTACCGCGGTCTTGACGTGTC**C**GTCATCCCGACCAGCGGCGATGTTGTCGTCGTG**G**C**A**AC**T**GA
HCV2	AATGCCGT**T**GCCTACTAC**A**G**G**GGTCT**C**GACGT**C**TC**C**GT**T**AT**A**CC**A**AC**TCAA**GG**A**GA**C**GT**G**GT**G**GTCGT**CG**C**C**ACCGA
HCV3	AA**C**GC**T**GT**A**GCGTACTA**TA**G**G**GGTCTTGA**T**GTGTC**C**GTCAT**A**CC**A**AC**A**A**CA**GG**A**GA**C**GT**C**GT**A**GT**TTGCG**C**T**AC**T**GA
HCV4	AATGC**T**GTGGCCTA**T**TAC**A**G**G**GG**G**CT**A**GACGT**C**TC**G**GT**G**AT**A**CC**A**AC**ATCT**GG**G**GA**C**GT**C**GT**G**GT**ATGCG**C**C**AC**A**GA
HCV5	AA**C**GCCGTGGC**A**TA**T**TAC**A**G**A**GGTCT**A**GACGT**CG**C**C**GTCAT**A**CC**CG**C**G**A**CA**GG**A**GA**C**GT**G**GTCGT**GTGCAGC**AC**T**GA
HCV6	AA**C**GCCGT**C**GC**A**T**T**CTAC**A**G**A**GGT**G**T**C**GA**T**GTGTC**C**GTCATCCC**C**ACC**TCG**GGCGATGT**G**GTCGTC**TGCG**C**C**AC**A**GA
	4314 4320 4330 4340 4350 4360 4370 4380 4390
H77 (NC_004102)	TGCTCTCATGACTGGCTTTACCGGCGACTTCGACTCTGTGATAGACTGCAACACGTGTGTCACTCAGACAGTCGATT
HCV1	TGCTCTCATGAC**C**GGCTTTACCGGCGACTTCGACTC**G**GTGATAGACTGCAACACGTGTGTCAC**C**CAGACAGTCGATT
HCV2	TGC**C**CT**A**ATGACTGG**A**T**AC**AC**T**GG**T**GACTT**T**GACTCTGT**C**AT**C**GACTGCAAC**GTTGCA**GTCACTCAGA**TT**GT**T**GA**C**T
HCV3	**C**GC**C**CTCATGACTGG**A**TT**C**ACCGG**A**GACTTCGA**T**TCTGT**C**ATAGA**T**TGCAAC**GTGGC**TGT**TGAA**CAG**TAC**GT**T**GA**C**T
HCV4	**C**GC**C**CTCATGAC**A**GGCTT**C**ACCGGCGACTT**T**GACTC**A**GTGATAGACTGCAACACGT**C**TGTCA**TA**CAGAC**T**GT**T**GA**C**T
HCV5	**C**GC**G**CTCATGAC**G**GG**G**TTTACCGGCGACTT**T**GA**T**TCTGT**C**ATAGACTGCAAC**T**C**CGCC**GTCAC**G**CAGAC**G**GT**G**GA**C**T
HCV6	**C**GC**C**CT**T**ATGACTGGCT**AC**AC**A**GGCGA**T**TTCGACTC**C**GT**C**AT**C**GACTG**T**AAC**GTTGCC**GT**G**AC**A**CAG**GTG**GT**T**GA**C**T

Table S5. *Cont.*

	4391 4400 4410 4420 4430 4440 4450 4460 4467
H77 (NC_004102)	TCAGCCTTGACCCTACCTTTACCATTGAGACAACCACGCTCCCCCAGGATGCTGTCTCCAGGACTCAACGCCGGGGC
HCV1	TCAGCCTTGACCCTACCTT**C**ACCATTGAGACAACCACGCT**T**CCCCAGGATGCTGTCTCC**C**G**C**ACTCAACG**T**CGGGGC
HCV2	TCAGCCT**A**GACCC**A**ACCTTTACCAT**CACC**AC**TCAA**AC**CG**TCCC**T**CAGGA**C**GCTGTCTCC**C**G**T**A**G**TCAACG**TA**G**A**GG**G**
HCV3	TCAGCCT**G**GACCC**C**ACCTTT**T**CCATTGAGAC**TCG**CAC**TGCT**CCCCA**A**GA**C**GC**G**GT**T**TCC**C**G**C**A**GC**CAACG**T**C**GT**GGC
HCV4	TCAGCCT**G**GACCCTACCTT**CT**CCAT**A**GAGAC**C**AC**A**AC**TG**T**A**CCCCAGGA**C**GC**G**GT**G**TCC**C**GGA**GC**CA**G**CG**GA**G**A**GGC
HCV5	TCAG**T**CT**G**GA**T**CC**C**ACCTT**C**ACCATTGAGAC**T**ACCAC**AG**T**G**CCCCAGGA**C**GC**A**GT**G**TCCAG**A**A**GC**CA**G**CG**TA**GGGGC
HCV6	TCAGCCT**G**GACCC**A**AC**A**TTT**T**CCAT**A**GAGAC**T**ACCAC**TG**TCCCCCAGGATGCTGTCTCC**C**GGA**GC**CAACG**G**CG**A**GGC
	4468 4480 4490 4500 4510 4520 4530 4540 4544
H77 (NC_004102)	AGGACTGGCAGGGGGAAGCCAGGCATCTACAGATTTGTGGCACCGGGGGAGCGCCCCTCCGGCATGTTCGACTCGTC
HCV1	AGGACTGGCAGGGGGAAGCCAGGCATCTACAGATTTGTGGCACCGGGGGAGCGCCCCTCCGGCATGTTCGACTCGTC
HCV2	AG**A**ACTGG**G**AGGGGG**CGA**C**TG**GGCAT**T**TACAG**G**T**A**TGT**CT**C**GT**C**A**GG**C**GAG**A**G**G**CC**G**TC**T**GG**G**ATGTTCGAC**AGCGT**
HCV3	**C**G**T**AC**G**GGC**C**G**A**GG**T**A**GA**C**TC**GG**T**A**CG**TAC**C**GAT**A**TGT**CA**C**C**CCC**C**GG**T**GA**AA**G**A**CC**G**TC**T**GG**A**ATGTT**T**GACTCG**GT**
HCV4	**C**G**C**ACTGG**T**AGGGGGA**GGTT**AGGCAT**A**TAC**C**G**G**T**A**TGT**CA**C**C**CCGGGGGAG**A**G**A**CC**G**TCCGGCATGTT**T**GAC**A**C**C**TC
HCV5	**C**G**C**AC**G**GG**A**AG**A**GG**T**A**G**GC**AC**GGCAT**A**TAC**C**G**G**T**AC**GT**CT**C**GT**C**T**GGGGAG**A**G**A**CC**G**TC**T**GGCAT**T**TTCGACTC**CGT**
HCV6	AG**C**AC**G**GG**G**AGGGG**T**AAGCC**C**GG**GG**T**G**TACAGAT**A**TGT**CT**C**G**C**AA**GGGGAGCG**G**CC**G**TC**G**GG**T**ATGTTCGAC**A**C**CGT**
	4545 4550 4560 4570 4580 4590 4600 4610 4621
H77 (NC_004102)	CGTCCTCTGTGAGTGCTATGACGCGGGCTGTGCTTGGTATGAGCTCACGCCCGCCGAGACTACAGTTAGGCTACGAG
HCV1	CGTCCTCTGTGAGTGCTATGACGCGGGCTGTGCTTGGTATGAGCTCACGCCCGCCGAGAC**C**ACAGTTAGGCTACGAG
HCV2	**A**GT**G**CTCTGTGAGTGCTA**C**GA**T**GC**C**GG**GGCA**GC**C**TGGTA**C**GAGCTCACGCC**T**GC**T**GAGACTAC**G**GT**G**AG**A**CT**C**CG**G**G
HCV3	**T**GT**T**CTCTGTGAGTGCTATGACGCGGGCTG**CT**C**G**TGGTA**C**GA**T**CT**GCA**GCCCGC**T**GAGAC**C**ACAGT**C**AG**A**CT**GA**GAG
HCV4	**A**GT**G**CTCTGTGAGTGCTATGA**T**GC**T**GG**G**TG**C**GCTTGGTA**C**GA**A**CT**G**AC**A**CC**G**GC**T**GAGAC**A**ACA**ACC**AGGCT**GA**G**G**G
HCV5	**G**GT**G**CTCTGTGAGTGCTA**C**GA**T**GC**C**GG**A**TGTGC**A**TGGTA**C**GA**T**CT**G**AC**C**CC**T**GC**T**GAGACTAC**C**GT**G**AGG**T**T**GC**G**T**G
HCV6	CGTCCT**G**TG**C**GAG**GC**CTATGAC**A**CGG**A**TG**C**GC**G**TGGTA**C**GA**A**CT**A**AC**C**CC**TT**C**T**GA**A**AC**A**AC**T**GT**C**AGGCT**GC**G**G**G

Table S5. *Cont.*

	4622 4630 4640 4650 4660 4670 4680 4690 4697
H77 (NC_004102)	CGTACATGAACACCCCGGGGCTTCCCGTGTGCCAGGACCATCTTGAATTTTGGGAGGGCGTCTTTACGGGCCTCAC
HCV1	CGTACATGAACACCCCGGGGCTTCCCGTGTGCCAGGACCATCTTGAATTTTGGGAGGGCGTCTTCACGGGCCTCAC
HCV2	C**T**TA**TT**T**C**AACAC**G**CC**C**GG**TT**T**G**CCCGTGTG**T**CA**A**GACCA**C**CT**G**GA**G**TT**C**TGGGAGG**CG**GTCTTCAC**A**GG**T**CTCAC
HCV3	C**T**TAC**T**TG**TC**CAC**G**CCGGGG**T**T**A**CC**T**GT**C**TGCCA**A**GACCATCT**A**GA**C**TTTTGGGAG**A**GCGTCTTCAC**T**GG**A**CT**A**AC
HCV4	C**T**TA**TT**T**C**AACAC**A**CC**A**GG**C**CT**C**CCCGT**C**TGCCA**A**GACCATCTTGA**G**TT**C**TGGGAG**A**GCGTCTT**T**ACGGG**GT**T**A**AC
HCV5	C**T**TAC**C**TGAACACCCC**C**GGGCT**C**CC**T**GT**C**TG**T**CA**A**GACCATCT**C**GAATTTTGGGAGGG**G**GT**G**TTCAC**A**GG**G**CT**T**AC
HCV6	C**C**TAC**C**TGAACAC**T**CC**T**GG**C**CT**C**CCCGT**A**TGCCA**A**GACCA**C**CTTGA**G**TTTTGGGAGGGCGT**G**TT**T**AC**T**GGCCT**G**AC
	4698 4710 4720 4730 4740 4750 4760 4773
H77 (NC_004102)	TCATATAGATGCCCACTTTCTATCCCAGACAAAGCAGAGTGGGGAGAACTTTCCTTACCTGGTAGCGTACCAAGCC
HCV1	**C**CATATAGATGCCCACTT**C**CTATCCCAGACAAAGCAGAGTGGGGAGAACTTTCCTTACCTGGTAGCGTACCAAGCC
HCV2	**A**CA**C**AT**T**GATGCCCACTT**C**CT**C**TCCCAGAC**G**AAGCA**AG**G**A**GG**A**GA**C**AACTTT**G**C**G**TACCT**AACG**GC**C**TACCA**G**GCC
HCV3	TCA**C**ATAGATGCCCACTTTCT**G**TC**A**CAGAC**T**AAGCAG**CAG**GG**ACTC**AACTT**CT**C**G**TACCT**AACT**GC**C**TACCAAGCC
HCV4	**C**CATATAGA**C**GCCCACTT**C**CTATCCCAGAC**C**AAGCAG**GCG**GG**T**GA**C**AACT**AC**CC**C**TACCTGGT**T**GC**T**TACCA**G**GCC
HCV5	T**A**A**C**AT**C**GA**C**GCCCAC**A**T**G**CT**G**TC**A**CAGAC**C**AA**A**CAG**G**GTGGGGA**A**AACTT**C**CC**A**TACCT**T**GT**G**GCGTACCAAGC**A**
HCV6	**C**CA**C**ATAGATGCCCACTT**C**CT**C**TC**T**CAGAC**G**AAGCAG**GCG**GGGGAGAACTT**CG**C**G**TACCT**C**GT**G**GC**C**TA**T**CA**G**GC**T**
	4774 4780 4790 4800 4810 4820 4830 4840 4849
H77 (NC_004102)	ACCGTGTGCGCTAGGGCTCAAGCCCCTCCCCCATCGTGGGACCAGATGTGGAAGTGTTTGATCCGCCTTAAACCCA
HCV1	ACCGTGTGCGCTAGGGCTCAAGCCCCTCCCCCATCGTGGGACCAGATGTGGAAGTGTTTGATCCGCCT**C**AA**G**CCCA
HCV2	AC**A**GTGTGCGCTAGGGC**AA**A**G**GCCCCTCC**T**CC**T**TCGTGGGAC**GT**GATGTGGAAGTGT**C**T**A**A**CTA**G**G**CT**C**AAACC**T**A
HCV3	AC**T**GTGTGCGC**CC**G**C**GC**G**CA**G**GC**T**CCTCCCCCA**AGT**TGGGAC**G**AGATGTGGAAGTGT**C**T**CG**T**G**CG**G**CTTAA**G**CC**A**A
HCV4	AC**A**GT**C**TG**T**GC**C**AGGGC**G**C**TG**GCCCC**C**CC**A**CC**CAGC**TGGGAC**ACT**ATGTGGAAGTG**CC**TGATCCGCCT**C**AA**G**CCCA
HCV5	AC**A**GT**C**TG**T**G**T**T**C**G**T**GC**GA**AAGC**G**CC**C**CCCCC**CAGC**TGGGAC**ACA**ATGTGGAAGTG**CA**TG**C**TCCG**T**CT**C**AAACC**G**A
HCV6	AC**A**GTGTGCGC**C**AGGGC**GA**AAGCCCC**C**CCCCC**C**TC**T**TGGGA**TAC**GATGTGGAAGTGT**C**T**C**ATCCG**G**CT**C**AA**G**CCCA

Table S5. *Cont.*

	4850 4860 4870 4880 4890 4900 4910 4920 4925
H77 (NC_004102)	CCCTCCATGGGCCAACACCCCTGCTATACAGACTGGGCGCTGTTCAGAATGAAGTCACCCTGACGCACCCAATCAC
HCV1	CCCTCCATGGGCCAACACCCCTGCTATACAGACTGGGCGCTGTTCAGAATGAAGTCACCCTGACGCACCCAATCAC
HCV2	C**A**CT**GAC**TGG**T**CC**T**AC**C**CCCCT**C**CT**G**TAC**C**G**CT**TGGGCGC**C**GT**GACC**AA**C**GA**G**GTCACCCTGACGCACCC**CG**T**G**AC
HCV3	C**A**CT**A**CATGG**A**CC**T**AC**G**CCCCT**T**CTATA**TC**G**GT**TGGG**GC**CTGT**C**CA**A**AATGAA**A**TC**TG**C**T**TGAC**A**CACCC**C**ATCAC
HCV4	CCCT**G**CA**C**GG**A**CC**C**AC**C**CCCCT**C**CT**T**TACAG**G**CTGGG**G**GCTGT**G**CA**A**AATGA**G**GT**G**AC**A**CTCAC**C**CA**T**CC**T**AT**A**AC
HCV5	C**T**CTAACTGG**C**CC**C**AC**T**CCCCT**C**CT**G**TACAG**G**CTGGG**G**GC**C**GT**C**CAGAATGA**GA**TCAC**A**CTGACGCACCC**C**ATCAC
HCV6	CCCT**TACA**GGGCC**C**AC**T**CCCCTG**T**T**G**TA**T**AG**G**CTGGG**G**GC**G**GT**C**CA**A**AATGA**GA**TCA**TAACA**AC**C**CA**T**CCAATCAC
	4926 4930 4940 4950 4960 4970 4980 4990 5001
H77 (NC_004102)	CAAATACATCATGACATGCATGTCGGCCGACCTGGAGGTCGTCACGAGCACCTGGGTGCTCGTTGGCGGCGTCCTG
HCV1	CAAATACATCATGACATGCATGTCGGC**T**GACCTGGAGGTCGTCACGAGCACCTGGGTGCTCGTTGGCGGCGTCCTG
HCV2	**G**AAATACATC**GCC**AC**G**TGCATG**CAA**GC**T**GACCT**T**GAG**A**TC**A**T**G**AC**A**AGCAC**A**TGGGT**C**CT**G**G**CA**GG**G**GG**G**GT**G**CTG
HCV3	**A**AAATACATCATG**G**CATGCATGTC**A**GC**T**GA**T**CTGGA**A**GT**AAC**CAC**C**AGCACCTGGGTG**T**T**GC**TTGG**A**GG**G**GTCCTC
HCV4	CAAATACATCATG**G**C**C**TGCATGTC**A**GC**G**GACCT**T**GAGGT**G**GT**G**AC**C**AGCAC**G**TGGGT**CT**T**G**GT**G**GGCGGC**A**TCCTG
HCV5	CAA**G**TACAT**T**ATGGC**T**TGCATGTC**C**GC**G**GAC**T**TGGAGGTC**A**T**T**AC**C**AGCAC**T**TGGGT**TT**T**G**GT**A**GG**G**GG**T**GTC**G**TG
HCV6	CAAATACATCATGAC**C**TGCATGTC**A**GC**G**GAC**T**TGGAGGTC**A**TCAC**C**AGCAC**A**TGGGT**C**CTCGT**G**GG**T**GG**A**GTCCT**A**
	5002 5010 5020 5030 5040 5050 5060 5070 5077
H77 (NC_004102)	GCTGCTCTGGCCGCGTATTGCCTGTCAACAGGCTGCGTGGTCATAGTGGGCAGGATTGTCTTGTCCGGGAAGCCGG
HCV1	GCTGCT**T**TGGCCGCGTATTGCCTGTCAACAGGCTGCGTGGTCATAGTGGGCAGGATTGTCTTGTCCGGGAAGCCGG
HCV2	GC**C**GC**CG**TGGC**A**GC**T**TA**C**TGCCTG**G**C**G**AC**C**GGCTGCGT**TTC**CAT**CA**T**T**GGC**C**G**C**AT**ACA**C**C**TG**AAT**G**ATCG**G**GTA**G
HCV3	GC**G**GC**C**CT**A**GC**G**GC**C**TA**C**TGC**T**TGTCA**GTC**GGCTGCGT**T**GT**G**AT**T**GTGGG**TCAT**ATTG**AGC**TG**GGG**GG**C**AAGCCGG
HCV4	GC**A**GC**C**CT**A**GC**T**GC**A**TA**C**TGC**T**TGTCA**GTG**GGC**A**GCGTGGT**G**AT**C**GT**C**GG**G**AGG**G**T**C**GTC**C**T**A**TC**G**GG**CC**A**A**CC**T**G
HCV5	GC**G**GC**C**CT**A**GC**G**GC**C**TA**C**TGC**T**TG**A**C**GGTG**GGCTC**G**GTGG**C**CATAGT**C**GG**T**AG**A**AT**CA**TC**C**T**A**TC**T**GGGA**GA**CC**T**G
HCV6	GC**C**GC**G**CT**C**GC**A**GC**C**TA**C**TGC**T**TGTCA**GTG**GGCTGCGT**T**GTCAT**CTGC**GGCAGGAT**CACTAC**G**A**C**T**GG**C**AAGCC**T**G

Table S5. *Cont.*

	5078 5090 5100 5110 5120 5130 5140 5153
H77 (NC_004102)	CAATTATACCTGACAGGGAGGTTCTCTACCAGGAGTTCGATGAGATGGAAGAGTGCTCTCAGCACTTACCGTACAT
HCV1	CAAT**C**ATACCTGACAGGGA**A**GT**C**CTCTACC**G**GGAGTTCGATGAGATGGAAGAGTGCTCTCAGCAC**C**TACCGTACAT
HCV2	**TTG**T**GGCC**CCTGACA**A**GGA**A**GT**C**CT**A**TA**TG**AGG**CC**TT**T**GATGAGATGGAAGA**A**TGC**G**C**CTCCA**A**AGCCG**C**CCT**CAT
HCV3	CA**C**T**CG**T**T**CC**A**GACA**AA**GAGGT**GT**T**G**TA**T**CA**AC**A**A**T**A**CGATGAGATGGA**G**GAGTGCTC**G**CA**AGC**C**GCC**CC**A**TA**T**AT
HCV4	C**CG**T**C**AT**C**CC**C**GAC**C**G**A**GAGGT**G**CTCTACCA**AC**AGTT**T**GA**C**GAGATGGA**G**GAGTGCTC**CA**AGCAC**C**T**T**CC**ACTAG**T
HCV5	C**C**AT**C**AT**T**CC**C**GACAGGGAGGT**G**CT**A**TACCAG**C**A**A**TT**T**GATGAGATGGA**G**GAGTGCTC**GGCCTC**C**C**T**G**CC**C**TA**T**AT
HCV6	C**TG**TT**G**T**C**CCTGA**TC**GGGAGGT**CT**T**G**TACCA**AC**A**A**TT**T**GA**C**GAGATGGA**G**GAGTGCTCT**AG**GCAC**A**T**C**CC**C**TAC**C**T
	5154 5160 5170 5180 5190 5200 5210 5220 5229
H77 (NC_004102)	CGAGCAAGGGATGATGCTCGCTGAGCAGTTCAAGCAGAAGGCCCTCGGCCTCCTGCAGACCGCGTCCCGCCAAGCA
HCV1	CGAGCAAGGGATGATGCTCGC**C**GAGCAGTTCAAGCAGAAGGCCCTCGGCCTCCTGCAGACCGCGTCCCGCCA**G**GCA
HCV2	**T**GAG**G**AAGGG**CA**G**CG**G**A**T**G**GC**G**GAG**AT**G**C**TCAAG**TCC**AAG**ATA**C**AA**GGCCTCCT**A**CA**ACAG**GC**CA**C**AAAA**CA**G**GC**C**
HCV3	CGA**A**CAAG**CTCAGG**T**AA**T**A**GC**CC**A**C**CAGTTCAAG**G**AGAA**A**G**T**CCT**T**GG**AT**T**G**CTGCAG**CGA**GC**CA**CCC**AA**CAA**CA**A
HCV4	CGAGCA**C**GG**CC**TG**CAA**CT**G**GC**A**GAGCA**A**TTCAA**A**CAGAAGGCCCTCGGC**G**T**G**CTG**A**A**C**A**T**CGC**CGG**C**AAG**CA**G**GC**C**
HCV5	**G**GA**CG**A**G**G**CACGTGCCA**T**T**GC**C**G**G**GCA**A**TTCAAG**G**AGAA**A**G**TG**CTCGGCCTC**A**T**TGGC**AC**G**GC**CGG**CC**AGA**AAGC**T**
HCV6	CG**CTG**A**G**GG**CCA**G**CA**G**A**T**A**GC**C**GA**A**CAGTTCAA**A**CA**A**AAGG**TG**CTCGG**T**CTC**A**T**C**CAGACC**A**C**CG**CC**AAG**CA**G**GCA
	5230 5240 5250 5260 5270 5280 5290 5300 5305
H77 (NC_004102)	GAGGTTATCACCCCTGCTGTCCAGACCAACTGGCAGAAACTCGAGGTCTTCTGGGCGAAGCACATGTGGAATTTCA
HCV1	GAGGTTATC**G**CCCCTGCTGTCCAGACCAACTGGCA**A**AAACTCGAGG**C**CTTCTGGGCGAAGCA**T**ATGTGGAA**C**TTCA
HCV2	**C**A**A**G**AC**AT**ACAG**CC**A**GC**CA**T**A**CAG**T**C**ATCA**TGGC**CC**AA**G**CT**T**GA**ACAA**TTT**T**GGGC**C**AA**A**CACATGTGGAA**C**TTCA
HCV3	G**CT**GT**C**AT**TGAG**CC**CATA**GT**AGCT**ACCAACTGGCA**A**AA**G**CT**T**GAGG**C**CTTCTGG**CAC**AAGCA**T**ATGTGGAATTT**TG**
HCV4	**C**AGG**AGGCAG**C**A**CC**A**G**TG**GTCCAG**T**CCAACT**TTGCC**AA**G**CT**T**GA**ACAG**TTCTGGGC**A**AAGCACATGTGGAA**C**TTCA
HCV5	GA**AAC**T**C**T**G**A**AA**CC**G**GC**A**G**C**C**AC**G**T**C**T**A**TG**TGG**AGC**A**GGGC**CGAGC**AG**TTCTGGGC**A**AA**A**CACATGTGGAA**C**TT**TG**
HCV6	GA**A**G**AAC**T**G**A**AG**CCTGCTGTCCA**TT**CC**GCG**TGGC**CT**AA**G**CT**T**GAGC**AG**TT**T**TGG**CA**GAA**A**CACATGTGGAA**C**TT**TG**

Table S5. *Cont.*

	5306 5310 5320 5330 5340 5350 5360 5370 5381
H77 (NC_004102)	TCAGTGGGATACAATACTTGGCGGGCCTGTCAACGCTGCCTGGTAACCCCGCCATTGCTTCATTGATGGCTTTTAC
HCV1	TCAGTGGGATACAATACTTGGCGGGCCTGTCAACGCTGCCTGGTAACCCCGCCATTGC**A**TCATTGATGGCTTTTAC
HCV2	TCAGTGG**C**ATACA**G**TAC**C**TGGCGGG**A**CT**C**TC**C**AC**C**CT**A**CC**G**GG**A**AA**T**CCCGC**AG**T**G**GC**A**TCA**A**TGATGGCTTT**C**A**G**
HCV3	T**G**AGTGGGAT**C**CA**G**TAC**C**T**A**GC**A**GGCCT**C**TC**C**AC**TT**TGCCTGG**C**AACCC**T**GC**TG**T**G**GC**G**TC**TC**T**T**ATGGC**G**TT**C**AC
HCV4	TCAG**C**GG**C**AT**C**CAATAC**C**T**T**GC**C**GG**GT**TGTC**C**AC**CT**TGCC**C**GG**C**AACCC**T**GCCATTGCTTC**CC**T**C**ATG**T**C**C**TT**C**AC
HCV5	TCAGTGGGAT**C**CAATAC**C**T**A**GC**T**GGCCT**T**TC**G**AC**CT**TGCC**G**GG**C**AA**T**CCCGCC**G**T**G**GC**CA**C**GT**TGATG**T**CTTT**C**AC
HCV6	TCAG**C**GGGAT**T**CA**G**TAC**C**TGGCGGGC**T**T**A**TC**C**AC**C**CTGCC**C**GG**C**AACCC**A**GC**TG**T**G**GC**A**TC**CC**T**C**ATG**T**C**A**TT**C**TC
	5382 5390 5400 5410 5420 5430 5440 5450 5457
H77 (NC_004102)	AGCTGCCGTCACCAGCCCACTAACCACTGGCCAAACCCTCCTCTTCAACATATTGGGGGGGTGGGTGGCTGCCCAG
HCV1	AGCTGC**T**GTCACCAGCCCACTAACCACT**A**GCCAAACCCTCCTCTTCAACAT**C**TTGGGGGGGTGGGTGGCTGCCCAG
HCV2	**C**GC**C**GC**AC**T**G**AC**T**AGCCCACTA**T**CCAC**CA**GC**ACC**ACC**A**TCCTCTT**G**AACAT**CA**TGGGGGG**A**TGG**T**TGGC**CT**CCCAG
HCV3	**T**GCT**T**C**A**GTCACCAG**T**CC**C**CT**G**AC**G**AC**CAA**CCAAAC**TA**T**GT**T**T**TT**T**AACATA**C**T**C**GGGGGGTGGGT**T**GCT**A**CCCA**T**
HCV4	**C**GC**C**GC**T**GTCACCAGCCC**C**CT**G**ACCAC**CCAA**CAAACCCTCCTCTTCAACAT**C**TT**A**GG**A**GGGTGGGTGGC**CT**C**G**CAG
HCV5	**C**GC**C**GC**G**GT**G**ACC**TC**CCCC**C**CT**T**AC**A**AC**ACAA**CA**G**ACCCTCCTCTT**T**AA**T**AT**TC**T**A**GG**A**GGGTGGGTGGC**CT**C**A**CAG
HCV6	AG**CGT**C**GC**T**G**ACCAGCCCACT**G**ACCACT**TCT**CA**G**ACCCTCCTC**C**TCAACAT**C**TT**A**GGGGGCTGGGT**A**GC**CT**CCCA**A**
	5458 5470 5480 5490 5500 5510 5520 5533
H77 (NC_004102)	CTCGCCGCCCCCGGTGCCGCTACCGCCTTTGTGGGCGCTGGCTTAGCTGGCGCCGCCATCGGCAGCGTTGGACTGG
HCV1	CTCGCCGCCCCCGGTGCCGCTACCGCCTTTGTGGGCGCTGGCTTAGCTGGCGCCGCCATCGGCAG**T**GTTGGACTGG
HCV2	**A**T**T**GCC**C**CCCC**T**G**CC**G**GG**GC**C**AC**T**G**G**CTT**C**GT**T**G**T**C**AG**TGG**TC**TAG**TG**GG**G**GC**G**GCC**G**TCGG**A**AGC**A**T**A**GG**C**CTGG
HCV3	**T**T**G**GC**A**G**GG**CCC**CAGAG**C**T**CT**T**CCGC**A**TT**C**GTGG**TAAGC**GGCTT**G**GC**C**GGCGC**T**GCCAT**A**GG**GG**G**TA**T**A**GG**C**CTGG
HCV4	**A**TCGC**GA**CCCCC**ACG**GCC**T**CTAC**G**GC**T**TTTGT**C**G**TGAGC**GGC**C**T**C**GC**G**GG**G**GC**T**GC**GG**T**T**GGCAG**T**GT**G**GG**C**CTGG
HCV5	**A**TCGC**GC**C**A**CCC**ACG**GCCGC**C**AC**T**GC**G**TT**C**GT**C**G**TTAG**TGG**AA**T**G**GC**C**GG**G**GCCGC**AG**TCGG**T**AGC**A**T**C**GG**GT**TGG
HCV6	CT**G**GC**TA**CCCCC**CCC**GC**GT**CTAC**A**GC**T**TTTGTGG**TGAGC**GGC**C**TAGC**A**GGCGCCGC**GG**T**G**GG**A**AGC**A**TTGG**G**CT**C**G

Table S5. *Cont.*

	5534 5540 5550 5560 5570 5580 5590 5600 5609
H77 (NC_004102)	GGAAGGTCCTCGTGGACATTCTTGCAGGGTATGGCGCGGGCGTGGCGGGAGCTCTTGTAGCATTCAAGATCATGAG
HCV1	GGAAGGTCCTCGTGGACAT**C**CTTGCAGGGTATGGCGCGGGCGTGGCGGGAGCTCT**C**GTAGCATTCAAGATCATGAG
HCV2	G**T**AAG**A**T**A**CT**G**GTGGAC**G**TT**T**T**G**GC**C**GGGTA**C**GG**T**GC**A**GGC**A**T**TT**C**A**GG**G**GC**C**CT**C**GTAGC**T**TT**T**AAGATCATGAG
HCV3	G**C**A**G**GGTC**T**T**GC**T**T**GACAT**C**CT**G**GCAGG**A**TA**C**GG**A**GC**T**GG**T**GT**CT**C**A**GG**C**GC**CT**T**G**GT**G**GC**T**TT**T**AAGATCATG**G**G
HCV4	GGAAG**A**TCCT**G**GT**C**GACATTCT**C**GC**T**GG**C**TA**C**GGCGC**C**GGCGT**A**GC**C**GG**C**GCT**G**T**G**GT**CA**C**C**TTCAAGATCATGAG
HCV5	G**T**A**G**GGTCCTC**A**T**C**GACAT**C**CT**A**GC**T**GG**A**TATGG**A**GC**A**GG**G**GTGGC**T**GGAGC**A**CT**C**GT**C**GC**C**TTCAAGATCATG**T**G
HCV6	GGAAGGTCCT**G**GT**T**GACAT**C**CT**C**GC**C**GG**A**TA**C**GG**A**GCGGGCGTG**T**CGGG**G**GCTCT**C**GT**C**GC**T**TTCAAGATCATGAG
	5610 5620 5630 5640 5650 5660 5670 5680 5685
H77 (NC_004102)	CGGTGAGGTCCCCTCCACGGAGGACCTGGTCAATCTGCTGCCCGCCATCCTCTCGCCTGGAGCCCTTGTAGTCGGT
HCV1	CGG**C**GAGGTCCCCTCCACGGAGGACCTGGTCAATCT**A**CTGCCCGCCATCCTCTCGCCTGGAGCCCTTGTAGTCGGT
HCV2	CGG**C**GAG**AAG**CCCTC**GGTA**GA**A**GA**TG**T**T**GTCAATCT**C**CTGCC**T**GC**T**ATCCT**G**TC**T**CCTGG**C**GC**TT**T**G**GTAGT**G**GG**A**
HCV3	**A**GG**A**GA**AC**TCCCC**A**C**TG**C**T**GAGGAC**A**TGGTCAA**C**CTG**T**TGCCCGCCAT**A**CT**A**TC**T**CC**G**GG**C**GC**T**CT**C**GT**C**GTCGGT
HCV4	CGG**C**GAG**A**T**G**CC**A**TC**A**AC**A**GAGGAC**T**TGGT**A**AA**CT**TGCT**C**CC**G**GCCAT**A**CT**A**TCGCC**G**GGAGCC**T**T**G**GT**G**GT**G**GG**G**
HCV5	CGG**G**GAG**AAG**CC**GA**C**AG**C**C**GA**A**GACCT**A**GT**A**AA**C**CT**C**CTGCC**TT**C**A**AT**A**CTCT**GC**CCTGGAGCCCT**A**GT**G**GTCGG**G**
HCV6	CGG**C**GAG**AC**CCC**GA**C**A**ACGGAGGAC**A**TGGTCAA**C**CTGCT**A**CCCGCC**C**T**GT**T**G**TC**A**CC**A**GG**G**GC**T**CT**C**GT**G**GT**G**GG**C**
	5686 5690 5700 5710 5720 5730 5740 5750 5761
H77 (NC_004102)	GTGGTCTGCGCAGCAATACTGCGCCGGCACGTTGGCCCGGGCGAGGGGGCAGTGCAATGGATGAACCGGCTAATAG
HCV1	GTGGTCTGCGCAGCAATACTGCGCCGGCACGTTGGCCCGGGCGAGGGGGCAGTGCA**G**TGGATGAACCGGCT**G**ATAG
HCV2	GT**CA**TCTG**T**GC**G**GCAAT**C**CTGCGCCG**C**CACGT**C**GGCC**A**GGG**A**GAGGGGGC**G**GT**C**CA**G**TGGATGAAC**A**GGCT**G**AT**C**G
HCV3	GTG**A**T**A**TGCGC**T**GC**C**ATACT**A**CG**T**CG**A**CACGT**A**GG**A**CC**T**GG**G**GAGGGGGC**G**GTGCA**G**TGGATGAAC**A**GGCT**C**AT**C**G
HCV4	GTGGT**G**TGCGC**C**GC**G**AT**C**CTGCG**G**CG**T**CACGT**G**GGCCCGGGCGAGGGGGC**T**GTGCA**G**TGGATGAACCG**T**CT**C**AT**T**G
HCV5	GT**CA**T**A**TGCGC**C**GC**GG**T**T**CTGCG**G**CG**C**CA**TA**TTGGCCC**A**GGCGAGGGGGC**T**GTGCA**G**TGGATGAA**TA**GGCT**G**AT**T**G
HCV6	GT**C**GT**G**TG**T**GC**T**GC**C**AT**CT**TGCG**A**CG**C**CACGTTGGCCC**C**G**CT**GAGGGGGC**TACC**CA**G**TGGATGAAC**A**GGCTAATAG

Table S5. *Cont.*

	5762 5770 5780 5790 5800 5810 5820 5830 5837
H77 (NC_004102)	CCTTCGCCTCCCGGGGGAACCATGTTTCCCCCACGCACTACGTGCCGGAGAGCGATGCAGCCGCCCGCGTCACTGC
HCV1	CCTTCGCCTCCCGGGGGAACCATGTTTCCCCCACGCACTACGTGCCGGAGAGCGATGCAGC**T**GCCCGCGTCACTGC
HCV2	CCTT**T**GCCTCC**A**G**A**GG**A**AACCATGTT**G**CCCC**T**AC**C**CACTACGTG**G**CGGAG**TCT**GA**C**GC**CT**C**GCAG**CGCGT**G**AC**GCA**
HCV3	C**A**TTCGC**A**TCCCGGGG**C**AACCA**C**GT**C**TC**A**CC**A**ACGCACTA**T**GT**T**CC**C**GAGAGCGATGC**T**GC**A**GC**GA**G**G**GTCAC**C**GC
HCV4	C**G**TTCGC**A**TC**G**CG**A**GG**C**AA**T**CA**C**GT**G**TC**T**CCCACGCACTACGT**C**CC**C**GAGA**C**CGA**C**GCAGC**G**GCCCGCGT**G**ACTGC
HCV5	C**G**TTCGC**T**TCCCGGGG**C**AA**T**CATGT**G**TC**T**CC**G**AC**A**CACTACGTGCC**C**GAGA**CG**GA**C**GC**GT**C**G**GCC**AAA**GTCAC**GCA**
HCV6	CCTT**T**GCCTC**AA**GGGG**C**AACCA**C**GT**G**TCCCCCACGCACTACGTGCC**T**GAGA**CT**GA**C**GC**GT**C**ACGGAAA**GT**G**ACT**AA**
	5838 5850 5860 5870 5880 5890 5900 5913
H77 (NC_004102)	CATACTCAGCAGCCTCACTGTAACCCAGCTCCTGAGGCGACTGCATCAGTGGATAAGCTCGGAGTGTACCACTCCA
HCV1	CATACTCAGCAGCCTCACTGT**C**ACCCAGCTCCTGAGGCGACTGCA**C**CAGTGGATAAGCTCGGAGTGCACCACTCCA
HCV2	**GG**T**G**CT**A**AGC**TCA**CTCAC**AATT**ACC**AGCT**T**A**CT**T**AGG**A**GACT**A**CAT**ACC**TGGAT**C**A**CTGAA**GA**T**TGC**C**C**AGTC**CCA
HCV3	**AT**T**G**CT**G**AG**TTCT**CT**A**ACTGT**C**AC**AAGT**CT**G**CT**CC**GGCG**GT**TGCA**C**CAGTGGAT**C**A**ATGAA**GA**C**T**A**C**C**C**A**A**G**TCC**T**
HCV4	CATACT**ATCATC**CCT**G**ACTGT**G**AC**ATCC**CTT**T**CT**C**AG**A**CG**C**CT**C**CA**CA**AGTGGAT**C**A**ATGA**GGA**C**TGC**T**CCACTCC**C**
HCV5	**GC**T**G**CTCAGC**TC**CCTCAC**A**GTAAC**ATCT**CT**T**CTGA**A**G**A**G**G**CT**C**CAT**ACA**TGGAT**CGGTGA**GGA**C**T**A**C**T**CCAC**G**CC**C**
HCV6	CATACTCAG**TTC**CCT**T**AC**CA**T**C**ACC**AGC**CT**A**CT**CC**G**TAAGT**T**A**CATCAGTGGAT**C**A**ATGAA**GA**C**TG**GT**CCAC**C**CC**T**
	5914 5920 5930 5940 5950 5960 5970 5980 5989
H77 (NC_004102)	TGCTCCGGTTCCTGGCTAAGGGACATCTGGGACTGGATATGCGAGGTGCTGAGCGACTTTAAGACCTGGCTGAAAG
HCV1	TGCTCCGGTTCCTGGCTAAGGGACATCTGGGACTGGATATGCGAGGTGCTGAGCGACTTTAAGACCTGGCT**A**AA**G**G
HCV2	TGCTC**G**GG**G**TC**T**TGGCT**CC**GGGACAT**T**TGGGA**T**TGG**G**T**T**TG**TTCC**AT**C**CT**C**A**CA**GACTTTAAGA**A**CTGGCTG**TCTT**
HCV3	TGC**AG**CGG**CGAT**TGGCT**GC**G**TAC**CATCTGGGACTGG**G**T**T**TGC**AC**GGTG**T**TG**TC**CGACTT**C**AAGAC**A**TGGCT**CTCT**G
HCV4	TG**TGA**C**TCA**TC**T**TGGCT**GT**GGGA**G**ATCTGGGACTGG**G**T**C**TGC**ACC**GT**A**CTGAG**T**GACTT**C**AAGAC**G**TGGCT**C**AA**G**G
HCV5	TG**TGAT**GG**CA**C**A**TGGCT**T**AGGG**C**CAT**T**TGGGACTGG**G**T**C**TGC**AC**GG**CA**CTGA**CA**GACTT**C**AA**AG**CCTGGCTG**C**A**G**G
HCV6	TGCTC**TACC**TC**A**TGG**T**T**GC**GCGACATCTGGGACTGG**G**T**G**TG**TACT**GTGCT**ATCT**GACTT**C**AAA**A**CCTGGCT**C**AAAG

Table S5. *Cont.*

	5990 6000 6010 6020 6030 6040 6050 6060 6065
H77 (NC_004102)	CCAAGCTCATGCCACAACTGCCTGGGATTCCCTTTGTGTCCTGCCAGCGCGGGTATAGGGGGGTCTGGCGAGGAGA
HCV1	CCAAGCTCATGCCACAACTGCCTGGGAT**C**CCCTTTGTGTCCTGCCA**A**CGCGGGTATAGGGGGGTCTGGCGAGG**G**GA
HCV2	C**A**AA**AT**T**GC**T**C**CC**CA**AA**A**TGCC**C**GG**CC**TTCCCTT**CA**T**C**TC**T**TGCCA**AAAG**GG**A**TA**C**AGGGG**T**GT**G**TGG**GCT**GG**CAC**
HCV3	C**T**AAG**A**TCATGCCA**GCG**CT**C**CCTGGG**C**T**G**CCCTT**CA**T**T**TCCTG**T**CA**AAAG**GG**A**TA**C**A**A**GGG**C**GT**G**TGGCG**G**GG**G**GA
HCV4	C**T**AAGCT**AC**TGCC**C**C**GCA**TGCC**C**GG**C**AT**C**CCCTT**CC**T**C**TCCTGCCA**AAAG**GGGTA**C**A**A**GGGGG**AG**TGGCG**G**GG**G**GA
HCV5	C**A**AA**A**CTC**C**T**C**CC**G**CAACT**C**CC**C**GG**AG**T**G**CCCTT**CC**T**C**TC**A**TGCCAG**A**G**A**GGGTA**C**A**A**GGG**T**GT**G**TGGCG**C**GG**G**GA
HCV6	CCAA**A**CT**TG**T**C**CCAC**CC**CTGCC**G**GGG**G**T**C**CCCTT**CC**T**C**TC**G**TGCCA**A**CG**G**GG**A**TA**C**A**G**GGG**A**GTCTGG**A**GAGG**T**GA
	6066 6070 6080 6090 6100 6110 6120 6130 6141
H77 (NC_004102)	CGGCATTATGCACACTCGCTGCCACTGTGGAGCTGAGATCACTGGACATGTCAAAAACGGGACGATGAGGATCGTC
HCV1	CGGCAT**C**ATGCACACTCGCTGCCACTGTGGAGCTGAGATCACTGGACATGTCAAAAACGGGACGATGAGGATCGTC
HCV2	**G**GG**A**AT**C**ATG**ACT**ACTCG**G**TG**T**C**CA**TG**C**GGAGC**AA**A**C**ATC**T**C**G**GG**C**CATGTC**CGC**A**TG**GG**C**AC**C**ATGA**AA**AT**AACA**
HCV3	CGG**TG**T**G**ATG**TCA**AC**A**CGCTG**T**C**CT**TG**C**GG**G**GC**ATCA**AT**A**AC**C**GG**T**CATGT**G**AA**G**AA**T**GGG**T**C**C**ATG**C**GG**C**T**T**G**CA**
HCV4	CGG**GG**T**A**ATGCACAC**CACA**TGCC**CT**TG**C**GG**C**GC**A**GAG**C**T**GG**C**C**GG**C**CA**CA**TCAAAAACGG**CT**CGATGAGGATCGTC
HCV5	**T**GG**AG**T**G**A**ATTC**CAC**CAAG**TG**T**C**CG**TG**C**GGAGC**GAC**GAT**AT**CTGG**C**CA**C**GT**G**AA**G**AACGG**A**AC**C**ATGAG**A**ATCGTC
HCV6	CGG**GG**T**GTGC**CACAC**CAC**CTGC**ACC**TG**C**GG**G**GC**C**GAGAT**AG**CTGG**C**CA**C**GTCAAAAACGGGAC**C**ATGA**A**GATC**ACA**
	6142 6150 6160 6170 6180 6190 6200 6210 6217
H77 (NC_004102)	GGTCCTAGGACCTGCAGGAACATGTGGAGTGGGACGTTCCCCATTAACGCCTACACCACGGGCCCCTGTACTCCCC
HCV1	GGTCCTA**A**GACCTGCAGGAACATGTGGAGTGGGAC**C**TTCCCCAT**C**AACGCCTACACCACGGGCCCCTG**C**AC**C**CCCC
HCV2	GG**C**CC**G**A**A**GACCTGC**TT**GAACATGTGG**CAG**GGGAC**C**TTCCCCAT**C**AA**TTGT**TACAC**AGAA**GG**G**CC**T**TG**CGTG**CC**AA**
HCV3	GG**G**CC**GC**G**C**AC**A**TG**TGCT**AACATGTGG**CAC**GG**T**AC**T**TTCCCCAT**C**AA**T**G**AG**TACACCAC**C**GG**A**CCC**A**G**C**AC**A**CC**TT**
HCV4	GG**G**CC**C**A**A**GACCTGCAG**C**AACA**CC**TGG**CA**TGGGAC**C**TTCCCCAT**C**AA**T**GC**T**TACACCAC**A**GGCCCC**G**G**CGTG**CCC**A**
HCV5	GG**C**CC**G**A**A**GA**TG**TGCAG**T**AACA**CC**TGG**CAC**GG**A**AC**C**TTCCC**A**AT**C**AACGCC**ACA**AC**A**AC**A**GG**G**CCC**A**GT**GTA**CC**TG**
HCV6	GG**G**CC**CC**GGAC**A**TGCAG**C**AACAT**C**TGG**CAC**GG**C**AC**T**TTCCCCAT**C**AA**T**GCC**AC**CAC**G**AC**C**GGCCC**TA**G**CGTG**CC**AA**

Table S5. *Cont.*

	6218 6230 6240 6250 6260 6270 6280 6293
H77 (NC_004102)	TTCCTGCGCCGAACTATAAGTTCGCGCTGTGGAGGGTGTCTGCAGAGGAATACGTGGAGATAAGGCGGGTGGGGGA
HCV1	TTCCTGCGCCGAACTATA**C**GTTCGCGCTGTGGAGGGTGTCTGCAGAGGAATACGTGGAGATAAGGCGGGTGGGGGA
HCV2	**AA**CC**CC**C**T**CC**T**AA**T**TA**C**AAG**AC**CGC**AA**T**T**TGGAGGGTG**G**C**A**GC**GTC**GGA**G**TACGT**T**GAG**G**T**C**A**C**GC**A**G**CAT**GG**CTC**
HCV3	**GC**CC**AT**C**A**CC**C**AACTA**C**A**CTCG**CGC**A**CT**A**TGG**C**G**C**GTG**G**CTGC**CA**A**CAGC**TACGT**T**GAG**G**T**GC**G**C**CGGGTGGGGGA
HCV4	T**C**CC**A**GCGCCGAACTA**C**AAGTTCGCGCTGTGGAGGGTGTC**C**GC**C**GAGGAATACGTGGAG**G**T**TC**G**CA**G**A**GTGGG**T**GA
HCV5	**CC**CC**G**GC**T**CC**C**AACTA**C**AAGTTCGC**CT**TGTGGAGGGT**AGGC**GC**T**G**C**GGA**C**TACG**C**GGAG**G**T**GC**G**C**CG**C**GT**A**GGGGA
HCV6	T**C**CC**A**GCGCC**C**AACTA**C**AAG**AGG**GC**T**CT**T**TGGAGGGT**A**TC**C**GC**T**GAGGA**G**TACGT**T**GAG**G**TA**C**GG**A**GGGTGGG**C**GA
	6294 6300 6310 6320 6330 6340 6350 6360 6369
H77 (NC_004102)	CTTCCACTACGTATCGGGTATGACTACTGACAATCTTAAATGCCCGTGCCAGATCCCATCGCCCGAATTTTTCACA
HCV1	CTTCCACTACGT**GA**CGGG**C**ATGACTACTGACAA**C**CTTAAATGCCCGTGCCAG**G**TCCCATCGCCCGAATTTTTCACA
HCV2	**T**TTC**TCG**TACGTA**A**CGGG**GT**T**A**AC**C**A**G**TGACAA**C**CTTAA**GGT**CCC**T**TGCCAG**G**T**A**CCA**G**C**T**CC**A**GA**G**TT**C**TTC**T**C**T**
HCV3	CTTCCA**T**TAC**A**T**TA**CGGG**GGCC**AC**AGAA**GA**TG**A**G**CT**C**AA**G**TG**T**CCGTGCCA**AG**T**G**CC**GG**C**TG**C**T**GA**G**TT**C**TT**T**AC**T**
HCV4	**T**TTCCA**T**TA**T**GT**CA**C**C**GG**GG**TGAC**ACAA**GA**T**AA**CA**T**C**AA**G**TGCCC**C**TGCCAG**G**T**T**CC**TG**C**C**CC**T**GA**G**TT**C**TTCAC**T**
HCV5	CT**A**CCACTAC**A**T**TA**CGGG**GG**TGAC**ACAG**GACAATCT**G**AA**G**TG**T**CC**C**TGCCAG**G**T**A**CCATC**T**CC**A**GA**G**TT**C**TTCAC**G**
HCV6	CT**G**CCACTACGT**GGTA**GG**GG**T**C**ACT**G**CTGAC**G**A**C**CT**G**AAATGCCC**A**TGCCAG**G**T**G**CC**TG**C**T**CC**T**GA**G**TT**C**TTCAC**T**
	6370 6380 6390 6400 6410 6420 6430 6440 6445
H77 (NC_004102)	GAATTGGACGGGGTGCGCCTACATAGGTTTGCGCCCCCTTGCAAGCCCTTGCTGCGGGAGGAGGTATCATTCAGAG
HCV1	GAATTGGACGGGGTGCGCCT**G**CATAGGTT**C**GCGCCCCCTTGCAAGCCCTTGCTGCGGGAGGAGGT**C**TCATTCAGAG
HCV2	**TGGG**TGGACGGGGTGC**AAA**TACA**CC**G**A**TT**C**GC**C**CCC**A**CT**CCAGGT**CCCTT**CT**T**T**CGGGA**T**GAGGTA**A**C**G**TTCA**CC**G
HCV3	GAA**G**TGGA**T**GGGGTG**A**G**A**CT**C**CA**CC**G**T**T**AC**GC**C**CC**T**CC**A**TG**T**AAGCCC**C**TG**T**TG**A**GGGA**T**GAG**A**T**CA**C**T**TTCA**TG**G
HCV4	GA**GG**TGGACGG**C**GT**CA**G**G**CTACA**CC**G**CCAC**GC**C**CC**TG**C**G**TGCAAGCCC**C**TGCTG**A**GGGA**C**GA**A**GT**GA**C**C**TTCA**CC**G
HCV5	GA**GC**TGGACGG**C**GTG**A**G**GA**T**T**CA**CC**G**C**TT**C**GCGCC**A**CC**C**TGCAA**C**CCC**C**T**C**CT**AA**GGGAGGAGGT**TA**C**T**TTC**TCC**G
HCV6	GA**GG**T**T**GA**T**GG**C**GTG**A**G**GA**TACA**CC**G**T**T**AC**GCGCC**A**CC**G**TGCAAGCCC**C**TGCTG**A**GGGA**C**GA**A**GT**GA**C**C**TTC**TCT**G

Table S5. *Cont.*

	6446 6450 6460 6470 6480 6490 6500 6510 6521
H77 (NC_004102)	TAGGACTCCACGAGTACCCGGTGGGGTCGCAATTACCTTGCGAGCCCGAACCGGACGTAGCCGTGTTGACGTCCAT
HCV1	TAGGACTCCACGAGTACCCGGTGGGGTCGCAATTACCTTGCGAGCCCGAACCGGACGT**G**GCCGTGTTGACGTCCAT
HCV2	TAGG**C**CTC**A**A**TTCC**T**TTGT**GGT**C**GG**C**TC**T**CA**GC**T**C**CCTTG**T**GA**C**CC**T**GA**G**CCGGAC**ACC**G**AG**GT**A**TTG**G**C**C**TCCAT
HCV3	TAGG**GT**T**GA**A**TTCC**TAC**G**CG**A**T**A**GG**A**TC**T**CAA**C**T**C**CC**C**TG**T**GAGCCCGAACC**A**GA**T**GT**TT**C**T**GTG**C**TGAC**C**TC**G**AT
HCV4	T**G**GG**C**CTC**A**AC**ACG**T**TTGT**GGTGGGGTC**C**CA**GC**T**C**CC**C**TGCGAGCC**A**GA**G**CC**A**GACGT**G**GCCGTGTT**A**AC**A**TCCAT
HCV5	T**G**GG**G**CT**G**CAC**TCC**TAC**GT**GGTGGGGTC**C**CAA**C**TACC**C**TG**T**GAGCC**A**GAACC**T**GA**T**GT**GA**CCGT**CC**TGACGTC**A**AT
HCV6	T**G**GG**T**CTC**TC**C**ACC**TAC**G**C**C**GT**A**GGGTCGCA**GC**T**C**CCTTGCGAGCC**A**GA**G**CC**A**GACGT**GATG**GT**CG**T**C**AC**A**TC**A**AT
	6522 6530 6540 6550 6560 6570 6580 6590 6597
H77 (NC_004102)	GCTCACTGATCCCTCCCATATAACAGCAGAGGCGGCCGGGAGAAGGTTGGCGAGAGGGTCACCCCCTTCTATGGCC
HCV1	GCTCACTGATCCCTCCCA**C**ATAACAGCAGAGGCGGC**TA**GGAGAAGGTTGGCGAG**G**GGGTCACCCCC**C**TCT**T**TGGCC
HCV2	GCT**G**AC**A**GA**C**CC**G**TCCCA**C**AT**C**AC**G**GC**G**GAGGCGGC**A**G**CC**AG**GC**G**A**TTGGC**C**AG**G**GG**A**TC**T**CCCCCTTC**ACA**GGCC
HCV3	G**T**T**G**AG**A**GA**C**CC**T**TCCCATAT**C**AC**C**GC**C**GAG**A**CGGC**A**G**C**G**C**G**CC**G**CC**T**T**GCG**C**G**C**GGGTC**C**CC**T**CC**A**TC**AGA**GGC**A**
HCV4	GCT**G**AC**A**GA**C**CC**A**TCCCA**C**AT**C**AC**C**GC**G**GAG**A**CGGC**GC**G**CC**G**G**AGG**C**TGGC**C**AG**G**GGGTCACC**G**CC**C**TC**GT**TGGCC
HCV5	GCT**GT**C**A**GA**C**CC**TG**CCCA**C**AT**C**AC**G**GCAGAG**A**CGGCC**AA**G**C**G**C**AGG**C**T**A**G**ATC**GAGGGTC**T**CC**G**CC**C**TCT**C**TGGC**T**
HCV6	GCT**G**AC**A**GA**C**CCCTC**A**CA**C**AT**C**AC**C**GCAGAGGCGGC**A**G**CAC**G**GC**G**CC**TGGCGAG**G**GGGTC**C**CCCCC**C**TC**CC**TGGCC
	6598 6610 6620 6630 6640 6650 6660 6673
H77 (NC_004102)	AGCTCCTCGGCCAGCCAGCTGTCCGCTCCATCTCTCAAGGCAACTTGCACCGCCAACCATGACTCCCCTGACGCCG
HCV1	AGCTCCTCGGC**T**AGCCAGCTGTC**T**GCTCCATCTCTCAAGGCAACTTGCACC**A**CCAACCATGACTCCCCTGACGCCG
HCV2	AGCTCCTC**A**GC**G**AGCCAGCT**C**TCCGC**C**CC**G**TC**CT**T**G**AAGGC**T**AC**C**TG**T**ACC**A**CC**C**A**TA**A**GATGG**C**ATA**TGA**TTGT**G
HCV3	AGCTC**A**TC**C**GCCAGCCA**A**CT**A**TC**A**GCTCC**G**TC**GT**T**G**AAGGC**C**ACTTGC**CAGA**C**GC**A**TAGGCCTCAT**CC**A**GACGC**T**G
HCV4	AGCTCCTCGGC**T**AGCCAGCT**T**TCCGC**C**CCATC**C**CTCAA**A**GC**C**AC**A**TGCACCGCC**C**ACCA**C**GACTCCCCTG**G**CGC**T**G
HCV5	AGCTCCTCGGCCAG**T**CAGCT**C**TC**G**GC**C**CC**C**TC**C**CTCAAGGC**T**AC**C**TGCAC**TA**C**AC**ACCA**CCCAGA**C**G**C**A**GAC**CT**C**A**
HCV6	AGCTC**A**TCGGCCAGCCAGCTGTC**A**GC**A**CC**G**TC**A**CT**G**AAGGC**C**AC**A**TGCAC**AA**C**GG**ACCA**CCCGGA**C**G**C**G**GA**ACTGA**

Table S5. *Cont.*

	6674 6680 6690 6700 6710 6720 6730 6740 6749
H77 (NC_004102)	AGCTCATAGAGGCTAACCTCCTGTGGAGGCAGGAGATGGGCGGCAACATCACCAGGGTTGAGTCAGAGAACAAAGT
HCV1	AGCTCATAGAGGC**C**AACCTCCTGTGGAGGCAGGAGATGGGCGGCAACATCACCAGGGTTGAGTCAGAGAACAAAGT
HCV2	A**CA**T**GG**T**G**GA**T**GC**C**AACCT**TT**T**C**------------ATGGG**A**GGC**G**A**TG**T**G**ACC**C**GG**A**TTGAGTC**C**GA**CTC**CAA**G**GT
HCV3	AGCT**AG**T**G**GA**C**GC**C**AAC**T**T**GT**T**A**TGG------GAGATGGGC**A**GCAACATCAC**AC**GGGT**A**GAGTC**T**GA**A**A**CA**AA**G**GT
HCV4	A**C**CTCAT**C**GA**A**GC**C**AA**T**CT**T**CTGTGG------------GG**T**G**C**CAAC**GC**CACCAGGGTTGAGTCAGAGAACAA**G**GT
HCV5	**TAGAGGCTA**A**TCTGCTATGGAGA**TG**C**---------ATGGG**A**GGCAACATCAC**GC**G**A**GT**G**GAG**G**C**C**GAGAACAA**G**GT
HCV6	**TCGAGGCCA**A**CCTCCTGTGGAG**G---------GAGATGGG**G**GGCAACATCAC**TC**G**A**GT**G**GAGTCAGAGAACAAAGT
	6750 6760 6770 6780 6790 6800 6810 6820 6825
H77 (NC_004102)	GGTGATTCTGGACTCCTTCGATCCGCTTGTGGCAGAGGAGGATGAGCGGGAGGTCTCCGTACCCGCAGAAATTCTG
HCV1	GGTGATTCTGGACTCCTTCGATCCGCTTGTGGC**G**GAGGAGGATGAGCGGGAG**A**TCTCCGT**T**CCCGCAGAAAT**C**CTG
HCV2	G**A**T**CG**TTCT**C**GACTCC**C**TCGA**CT**C**CA**T**GACC**G**AG**G**TA**GAGGA**C**GA**T**CG**T**GAG**CCT**TC**T**GTACC**AT**CAGA**GTACT**TG
HCV3	**T**GTGATTCT**T**GA**T**TC**A**TTCGA**A**CC**T**CT**GAGA**GC**C**GA**AACT**GATGA**CGCC**GAG**C**TCTC**G**GT**GG**C**T**GCAGA**GTGTT**TC
HCV4	GGTG**G**T**G**CTGGACTC**T**TT**T**GA**G**CC**A**CTTGTGGC**C**GAG**CC**GGATGA**CA**GGGAGGTCTCCGT**CG**CCGCAGA**G**AT**C**CTG
HCV5	**C**GTGAT**C**CT**T**GACTCCTT**T**GA**G**CCGCT**C**---**AAG**G**C**GGA**A**GA**C**GA**CA**GGGAG**A**TCTC**T**GT**GT**CCGC**T**GA**CTGCT**T**T**
HCV6	**C**GT**CG**T**A**CT**C**GACTCCTT**T**GA**G**CC**C**CT**CACCCCT**GAG**T**A**T**GA**C**GAG**GAAATATCAGTATC**A**G**C**T**G**AGTGCCACAG**G
	6826 6830 6840 6850 6860 6870 6880 6890 6901
H77 (NC_004102)	CGGAAGTCTCGGAGATTCGCCCGGGCCCTGCCCGTTTGGGCGCGGCCGGACTACAACCCCCCGCTAGTAGAGACGT
HCV1	CGGAAGTCTCGGAGATTCCCCCCGGCCCTGCCC**A**TTTGGGCGCGGCCGGACTACAACCCCCCGCT**GC**TAGAGACGT
HCV2	**ATC**A**C**G**AGGA**GGA**AG**TTCCC**A**CCGGC**A**CT**A**CC**TCCC**TGGGC**C**CG**T**CC**A**GACTACAACCC**T**CC**TG**T**GA**T**C**GAGAC**A**T
HCV3	**AA**GAAA**AC**CTC**CC**A**AG**T**AT**CC**T**CC**A**GCCC**T**TCC**TA**T**C**TGGGC**TA**GGCC**A**GACTACAACCC**T**CC**A**CT**GT**T**G**GA**CCGC**T
HCV4	CG**CCCCA**C**CAA**GA**AG**TTCCC**G**CCGGCC**A**TGCC**AA**TTTGGGC**C**CGGCC**A**GA**T**TACAACCC**A**CC**T**CT**G**GT**T**GAGACGT
HCV5	**A**GGA**G**G**GGA**C**C**G**GCG**TT**T**CCCCC**C**GCCCTGCC**A**GT**A**TGGGC**AA**GGCCGG**GG**TA**TG**ACCC**A**CC**C**CT**CC**T**G**GAGAC**T**T
HCV6	C**CACCCAGG**C**CT**AAATTCCC**T**CCAGC**T**CT**C**CCC**A**T**A**TGGGC**CA**GGCC**T**GACTACAACCC**A**CC**T**CT**GC**TAGAGAC**A**T

Table S5. *Cont.*

	6902 6910 6920 6930 6940 6950 6960 6970 6977
H77 (NC_004102)	GGAAAAAGCCTGACTACGAACCACCTGTGGTCCATGGCTGCCCGCTACCACCTCCACGGTCCCCTCCTGTGCCTCC
HCV1	GGAAAAAGCC**G**GACTACGAACCACCTGTGGTCCATGGCTGCCC**A**CT**T**---CCTCCAC**A**GTCCCCTCCTGTGCCTCC
HCV2	GGAA**G**A**G**GCC**G**GACTA**T**GAACCACC**CACT**GTCC**TA**GGCTG**TG**C**C**CT**C**---CC**CA**CAC**CTCAAG**C**G**CC**A**GTGCC**C**CC
HCV3	GGAAA**GCA**CC**G**GA**T**TA**T**G**T**ACCACC**AACT**GTCCATGG**A**TGC**G**C**CT**TA---CC**A**C**GGG**G**CG**C**T**CC**A**CC**G**GTGCCTCC
HCV4	GGAA**GC**A**A**CC**G**GACTACGAACC**T**CC**G**GT**C**GT**T**CA**C**GG**G**TGC**G**C**C**CT**G**---CC**CAGTAA**G**C**C**G**CC**C**CC**C**GT**T**CCTCC
HCV5	GGAA**GCG**GCC**G**GA**T**TA**T**GA**C**CC**C**CC**CCA**GGT**GTCA**GGCTGCCCGCTA---CCT**G**C**GG**G**CCT**CCC**G**CCTGT**C**CC**G**CC
HCV6	GGAA**G**A**C**GCC**C**GA**A**TACGA**G**CC**T**CC**A**GTGGT**GTC**TGG**G**TG**TG**C**C**CT**G**---CC**A**CC**TAAAC**C**GA**CTCC**AA**T**T**CCTCC
	6978 6990 7000 7010 7020 7030 7040 7053
H77 (NC_004102)	GCCTCGGAAAAAGCGTACGGTGGTCCTCACCGAATCAACCCTATCTACTGCCTTGGCCGAGCTTGCCACCAAAAGT
HCV1	GCCTCGGAA**G**AAGCG**G**---GTGGTCCTCACCGAATCAACC**G**TATCTACTGCCTTGGCCGAGCTTGCCACCAA**G**AG**C**
HCV2	**A**CCTCGGA**GGCGC**CG**C**---**AAA**GTCCT**G**AC**TC**A**GGAC**A**ATG**T**GGAGGGG**G**T**C**C**T**CAGG**GAG**A**T**G**GCC**GA**CAAA**GTG**
HCV3	**C**CCTCGGA**GG**AA**AA**G**A**---**A**T**CCAG**CT**GGAT**G**GC**TC**C**A**ATG**T**G**TC**CG**C**G**GC**GC**T**A**GC**T**G**C**GCT**A**GC**GGAA**AAA**TCA**
HCV4	**C**CC**CA**GGA**GG**AAGCG**G**---GT**C**GT**G**CTC**T**CCGA**G**TC**C**A**A**C**G**T**C**TC**AGAC**GCCTTGGC**G**GA**CT**T**G**GC**AG**C**G**AA**GTCC**
HCV5	**T**CC**G**CGGA**GG**AAG**A**G**G**A**A**G**A**TGG**AA**CT**AT**C**T**GA**C**TC**T**ACC**G**T**G**TC**CCAA**G**T**C**A**TGGCCGA**CT**T**G**GC**GCA**C**GCC**AG**G**
HCV6	**A**CC**GA**GGA**GG**AAG**A**G**GCT**G**CACC**T**GGATGAGTCCA**C**GGT**C**TC**A**CACG**C**CTTGGC**G**CAGCT**G**GCC**G**AG**A**AG**A**CGTT**T
	7054 7060 7070 7080 7090 7100 7110 7120 7129
H77 (NC_004102)	TTTGGCAGCTCCTCAACTTCCGGCATTACGGGCGACAATACGACAACATCCTCTGAGCCCGCCCCTTCTGGCTGCC
HCV1	TTTGGC---TCCTCAACTTCCGGCATTACGGGCGACAATACGACAACATCCTCTGAGCCCGCC**T**C**C**TCTGGCTGC-
HCV2	TT**CA**GC---**CG**C**GACT**C**CGG**C**CATTCC**AC**C**GG**G**GA**GG**A**C**AC**CGG**A**GGGGA**C**A**C**C**G**GC**C**AG**G**A**CCC**CC**CTG**AGGAG**-
HCV3	TT**CCCGTC**C**GAAGAG**A**A**T**AG**C**TCATCCT**C**A**GG**G**G**T**C**G**A**C**AC**ACAGT**C**CAG**C**A**CT**ACTT**CC**AAGGTGC**C**CCCT**T**CT**-
HCV4	TTTGGC**CAGC**C**GGACT**CC**GATTC**C**GGGG**C**A**GGC**CT**CA**CC**AC**CC**CAAC**TGAGA**CT**TCTGA**C**C**C**AGACC**C**CAT**C**ATT**-
HCV5	TT**CAAGGC**C**C**C**A**TC**C**A**T**T**GAA**GGC**CAGGATTCT**G**CGTTGGGC**AC**TGGCAG**C**CAACCCGATT**C**AGGGC**CTG**AGGAA**-
HCV6	**CCG**G**AG**A**CTG**CC**C**CA**G**C**AG**CC**A**G**TGCAGACTC**GG**GACTAG**C**A**AC**T**AC**CAGTG**CCG**CTG**C**A**GC**GG**C**CC**C**A**G**CAGCA**-

Table S5. *Cont.*

	7130 7140 7150 7160 7170 7180 7190 7200 7205
H77 (NC_004102)	CCCCCGACTCCGACGTTGAGTCCTATTCTTCCATGCCCCCCCTGGAGGGGGAGCCTGGGGATCCGGATCTCAGCGA
HCV1	--CC**A**GACTCCGACG**C**TGAGTCCTATTCTTCCATGCCCCCCCTGGAGGGGGAGCCTGGGGATCCGGATCTC---**AG**
HCV2	--**G**C**C**G**CT**TC**A**GA**AACG**G**GA**TC**ACTG**TC**C**TCCATGCC**T**CCCCT**T**GAGGG**A**GAGCC**G**GGGGA**C**CC**T**GA**C**CT**GGAGTC**
HCV3	--**GGG**GA**G**TCCGAC**TCA**GAGTC**A**T**GC**TC**G**TCCATGCC**T**CC**T**CT**C**GAGGG**A**GAGCC**G**GG**C**GATCCGGA**CT**T**G**---**TG**
HCV4	--**GA**C**A**A**A**TC**A**GACG**AC**G**G**GTC**T**TA**C**TC**G**TC**A**ATGCC**T**CC**A**CT**T**GA**A**GGGGAGCC**C**GG**T**GA**C**CC**A**GA**CT**T**G**---**TC**
HCV5	--**GAT**GACTC**G**GACG**CG**G**CT**TCATATTCTTCCATGCC**T**CC**G**CT**A**GAGGG**C**GAGCCTGGGGA**C**CC**T**GA**C**CT**T**---**TC**
HCV6	--**G**CCG**C**CTC**A**GA**A**G**CA**GAGTCCTA**CAGC**TCCATGCCCCC**T**CT**T**GAGGG**C**GAGCC**C**GG**A**GA**C**CC**T**GA**C**CT**A**---**TC**
	7206 7210 7220 7230 7240 7250 7260 7270 7281
H77 (NC_004102)	CGGGTCATGGTCGACGGTCAGTAGTGGGGCCGACACGGAAGATGTCGTGTGCTCAATGTCTTATTCCTGGACAGGC
HCV1	CGGGTCATGGTCGACGGTCAGTAGTGGGGCCG**C**CACGGA**G**GATGTCGTGTGCTCAATGTCTTAC**A**CCTGGACAGGC
HCV2	**TAA**GTC**G**TGGTC**C**AC**A**GTC**TC**T------G**ATC**A**AGA**GGA**TTC**TGTC**A**T**C**TGCTC**C**ATGTC**A**TACTCCTGGAC**G**GG**G**
HCV3	CG**AC**TC**T**TGGTC**C**AC**C**GT**T**AGT------**AG**CGA**GGA**G**C**A**GAGC**GT**G**GT**C**TGCTC**T**ATGTC**G**TACTC**T**TGGAC**C**GGC
HCV4	**A**G**AC**TC**T**TGGTC**C**AC**C**GTCAG**C**------**T**C**G**GA**GGAC**------GT**A**GTGTG**T**TCAATGTC**A**TACTC**A**TGGAC**G**GG**G**
HCV5	**A**GGGTC**G**TGGTC**A**AC**C**GTCAG**C**------G**AG**GACA**GC**------GT**G**GTGTG**T**TC**C**ATGTC**A**TAC**AG**CTGGAC**T**GG**G**
HCV6	**A**GGGTC**T**TGGTC**C**ACGGTCAG**C**------G**AG**GAC**GAC**------GTCGT**C**TGCTC**C**ATGTC**C**TACTCCTGGAC**G**GG**G**
	7282 7290 7300 7310 7320 7330 7340 7350 7357
H77 (NC_004102)	GCACTCGTCACCCCGTGCGCTGCGGAAGAACAAAAACTGCCCATCAACGCACTGAGCAACTCGTTGCTACGCCATC
HCV1	GCACTC**A**TCACCCCGTGCGC**C**GCGGAAGAACAAAAACTGCCCATCAACGCACTGAGCAACTCGTTGCT**G**CG**T**CA**C**C
HCV2	GC**C**CTC**A**T**A**AC**A**CC**A**TG**T**G**GGC**CC**C**GA**G**GA**GG**A**G**AA**GT**TGCC**A**ATCAAC**C**C**T**CTGAG**T**AA**T**TCG**C**T**CA**T**G**CG**GTTC**C
HCV3	GC**C**CT**GA**T**A**AC**A**CC**A**TG**TAG**TGC**T**GA**G**GA**GG**A**G**AAACTGCCCATCA**G**C**C**CACT**C**AGCAACTC**C**TTGCT**GA**G**A**CATC
HCV4	GC**G**CT**T**GT**A**AC**A**CC**C**TGCGC**A**GC**T**GA**G**GA**GTCC**AA**G**CTGCC**A**ATCAAC**C**C**C**CTGAGCAACTC**AC**T**A**CT**G**CGCCA**C**C
HCV5	GC**G**CTC**A**TCACCCC**T**TGC**T**CTGC**T**GA**G**GA**GG**AAAAA**T**T**A**CC**T**ATCAA**TC**C**CT**T**A**AGCAAC**A**C**CC**T**AT**T**G**CGCCA**C**C
HCV6	GC**T**CTC**A**TCAC**A**CC**A**TG**T**GCTGCGGA**G**GA**GG**A**G**AA**G**CTGCC**A**AT**A**AA**TC**C**C**CTGAGCAACTC**CC**T**CA**TACG**A**CA**C**C

Table S5. *Cont.*

	7358 7370 7380 7390 7400 7410 7420 7433
H77 (NC_004102)	ACAATCTGGTGTATTCCACCACTTCACGCAGTGCTTGCCAAAGGCAGAAGAAAGTCACATTTGACAGACTGCAAGT
HCV1	ACAATCTGGTGTATTCCACCAC**C**TCACGCAGTGCTTGCCAAAGGCAGAAGAAAGTCACATTTGACAGACTGCAAGT
HCV2	ACAA**CAA**GGTGTA**C**TCCAC**A**AC**A**TC**GA**G**G**AGTGC**C**T**CT**C**TG**AGG**GCA**AAGAA**G**GT**G**AC**T**TTTGACAG**GG**TGCA**G**GT
HCV3	A**T**AA**C**CT**A**GTCTATTC**A**AC**GT**C**G**TC**TA**G**A**AG**C**GCTT**CT**CA**GC**G**T**CAGAAGAA**G**GT**T**AC**C**TT**C**GACAGACTGCA**G**GT
HCV4	ACAA**CA**TGGTGTA**CG**CCAC**G**AC**C**TC**C**CG**TTCC**GC**CGC**C**ACCC**GGCAGAAGAA**G**GTCAC**C**TT**C**GAC**C**G**CA**TGCA**G**GT
HCV5	ACAATCT**T**GTGTA**C**TCCAC**TT**C**C**TC**C**CG**A**AGTGC**GG**G**T**CA**G**AGGCAGAAGAA**G**GTCAC**C**TTTGACAG**G**CT**A**CAAGT
HCV6	A**T**AA**C**CTGGTGTATTCCACCAC**A**TCACGCAG**C**GC**AGC**CC**TGC**GCCAGAAGAA**G**GTCACATTTGAC**C**GA**G**TGCAAGT
	7434 7440 7450 7460 7470 7480 7490 7500 7509
H77 (NC_004102)	TCTGGACAGCCATTACCAGGACGTGCTCAAGGAGGTCAAAGCAGCGGCGTCAAAAGTGAAGGCTAACTTGCTATCC
HCV1	**C**CTGGACA**A**CCATTACCAGGACGTGCTCAAGGAGGT**T**AA**G**GC**G**GCGGCGTCAAAAGTGAAGGCTAACTTGCTATCC
HCV2	**G**CTGGAC**GCA**CA**C**TA**TG**A**CTCA**GT**CT**T**GC**AGGA**C**GT**T**AA**GCGG**GC**C**GC**C**TC**C**AA**G**GT**T**A**GT**GC**G**A**GGC**T**C**CT**C**TC**A**
HCV3	**G**CT**C**GAC**GA**CCATTAC**A**AG**ACT**G**CAT**T**A**AAGGAGGT**A**AA**G**G**AGCGA**GCGTC**T**A**GG**GT**A**AAGGCT**CG**C**A**TGCT**CA**CC
HCV4	**GG**TGGACA**A**CCA**C**TACCA**T**GA**A**GT**A**CT**T**AAGGAG**A**T**T**AA**G**GCA**CGA**GCGTC**C**A**G**AGTGAAGGC**GCGGACC**CT**C**TC**T**
HCV5	**C**CT**C**GAC**GA**CCA**C**TAC**AGA**GA**G**GT**TG**T**GG**A**C**GAG**A**T**G**AA**GCG**A**TTA**GC**T**TC**C**AA**G**GT**T**AAGGC**C**A**GAC**T**A**CT**GC**CC
HCV6	**G**CT**C**GAC**CAA**CATTA**T**CA**T**GA**T**GT**A**CT**A**AAGGAG**A**T**T**AA**GCTCCG**GGCGTC**C**AA**G**GTGAAGGC**A**AA**GC**T**C**CT**C**TCC
	7510 7520 7530 7540 7550 7560 7570 7580 7585
H77 (NC_004102)	GTAGAGGAAGCTTGCAGCCTGACGCCCCCACATTCAGCCAAATCCAAGTTTGGCTATGGGGCAAAAGACGTCCGTT
HCV1	GTAGAGGAAGCTTGCAGCCTGACGCCCCCACATTCAGCCA**G**ATCCAA**A**TTTGGCTATGGGGCAAAAGACGTCCGTT
HCV2	GTAGAGGAAGC**C**TGC**GCG**CTGAC**C**CC**G**CC**C**CA**C**TC**C**GCCA**G**ATC**ACG**GT**AC**GG**A**T**T**TGGGGCAAA**G**GA**G**GT**G**CG**CA**
HCV3	**A**T**C**GAGGAAGC**G**TGC**GCG**CT**CGTC**CC**T**CC**T**CA**C**TC**T**GCC**CGG**TC**G**AAGTT**C**GG**G**TAT**A**G**T**GC**G**AA**G**GACGT**T**CG**C**T
HCV4	GT**T**GAGGAAGC**C**TGC**GA**CCTGACGCCCCC**C**CATTC**T**GCCA**G**ATC**A**AAGTTTGGCTA**C**GGGGCAAA**G**GACGT**T**CG**GA**
HCV5	**C**TAGAGGAAGCTTG**TG**G**GT**T**A**AC**A**CC**A**CC**C**CATTC**C**GCC**CGT**TCCAA**A**T**AC**GG**A**TA**C**GGCGC**G**AA**G**GA**A**GT**T**CG**C**T
HCV6	**A**TAGAGGAAGC**C**TGC**GA**CCT**C**AC**C**CC**A**CC**G**CA**C**TCAGCC**CGG**TCCAAGTTTGG**G**TATGGGGC**G**AA**G**GACGT**TAG**GA

Table S5. *Cont.*

	7586 7590 7600 7610 7620 7630 7640 7650 7661
H77 (NC_004102)	GCCATGCCAGAAAGGCCGTAGCCCACATCAACTCCGTGTGGAAAGACCTTCTGGAAGACAGTGTAACACCAATAGA
HCV1	GCCATGCCAGAAAGGCCGTA**AA**CCACATCAACTCCGTGTGGAAAGACCTTCTGGAAGACAGTGTAACACCAATAGA
HCV2	GC**TTAT**CCAG**G**A**G**GGCCGT**TAA**CCACATC**CGG**TCCGTGTGG**G**A**G**GACCT**C**CTGGAAGAC**CAACAT**ACACCAAT**T**GA
HCV3	**C**C**TTGT**CCAG**C**AAGGCC**A**T**TAA**CCA**G**ATC**CG**CTCCGTCTGG**G**A**G**GAC**T**T**G**CTGGAAGACA**CCAC**AAC**T**CCAAT**TCC**
HCV4	GCCAT**T**CC**C**G**C**AAGGCC**A**T**TAA**CCACATCAACTCCGTGTGG**G**A**G**GAC**T**T**G**CTGGAAGACA**ACACT**AC**C**CC**C**AT**TCC**
HCV5	**CT**C**TC**G**A**CA**AG**AA**A**GCC**C**T**TAAG**CACATC**G**A**GGGT**GTGTGG**C**AAGAC**T**T**A**CTGGA**T**GAC**TC**TG**AT**AC**C**CCA**T**T**GCC**
HCV6	GCCATGC**T**AG**C**AAGGCC**A**T**TAA**CCACATCAACTCCGTGTGG**G**A**G**GAC**T**T**G**CT**A**GAAGACA**C**TG**A**AACACCAAT**TCC**
	7662 7670 7680 7690 7700 7710 7720 7730 7737
H77 (NC_004102)	CACTACCATCATGGCCAAGAACGAGGTTTTCTGCGTTCAGCCTGAGAAGGGGGGTCGTAAGCCAGCTCGTCTCATC
HCV1	CAC**C**---ATCATGGC**T**AAGAACGAGGTTTTCTGCGTTCAGCCTGAGAAGGGGGGTCGTAAGCCAGCTCGTCTCATC
HCV2	CAC**C**---ATCATGGCCAA**A**AA**T**GAGGT**G**TTCTG**T**GTT**G**A**T**CC**CACC**AA**A**GGCGG**GAAA**AAGCCAGCTCG**C**CTCATC
HCV3	**A**AC**C**---ATCATGGC**G**AAGAACGAGGT**G**TT**T**TG**T**GT**GG**A**C**CC**C**G**TT**AAGGGGG**C**CG**C**AAGCC**C**GCTCG**C**CTCAT**T**
HCV4	**A**AC**A**---ATCATGGCCAAGAA**T**GAGGT**C**TTCT**CT**GT**GA**A**A**CC**G**GAGAAGGGCGG**C**CG**A**AAGCCAGCTCGTCT**A**ATC
HCV5	**G**AC**C**---ATCATGGC**A**AAA**A**AACGAGGT**G**TTC**GCA**GT**GG**AGCC**GTCC**AAGGGGGG**GAAG**AAGCCAGC**A**CG**G**CT**A**AT**A**
HCV6	**T**AC**C**---ATCATGGCCAAGAA**T**GAGGT**C**TTCTGCGT**GG**A**T**CC**GTC**GAAGGGGG**A**CG**C**AAGCC**G**GC**A**CG**C**CT**G**ATC
	7738 7750 7760 7770 7780 7790 7800 7813
H77 (NC_004102)	GTGTTCCCCGACCTGGGCGTGCGCGTGTGCGAGAAGATGGCCCTGTACGACGTGGTTAGCAAGCTCCCCCTGGCCG
HCV1	GTGTTCCCCGACCTGGG**T**GTGCGCGTGTGCGAGAAGATGGCCCTGTACGACGTGGT**C**AGCAAGCTCCC**T**CTGGCCG
HCV2	GT**A**T**A**CCC**T**GACCT**T**GG**G**GT**CA**G**G**GTGTGCGAGAAGATGGCCCT**C**TA**T**GAC**A**T**T**G**CACAA**AAGCT**T**CCC**AA**GGC**A**G
HCV3	GTGT**A**CCC**T**GACCTGGG**G**GTGCG**T**GT**C**TG**T**GAGAA**ACGC**GCCCT**A**TA**T**GACGTG**A**T**ACAG**AAG**T**T**GT**C**AA**T**TGAGA**
HCV4	GT**A**T**A**CCC**G**GACCTGGG**G**GTGCG**G**GTGTGCGAGAAGA**G**GGC**G**CT**T**TA**T**GACGT**C**GT**C**A**AA**AA**A**CT**T**CC**TAA**GGCCG
HCV5	GT**C**T**A**CCCCGACCT**T**GG**A**GT**C**CGCGT**C**TGCGAGAAG**CG**GGC**AT**TGTACGAC**A**T**A**G**C**T**CAA**AA**A**CT**G**CC**GACA**GCC**C**
HCV6	GT**T**T**A**CCC**G**GACCT**A**GGCGTGCG**G**GTGTGCGAGAAGA**G**GGCCCT**A**TACGAC**A**T**CACGC**G**G**AAG**T**T**A**CC**A**CTGGCCG

Table S5. *Cont.*

	7814 7820 7830 7840 7850 7860 7870 7880 7889
H77 (NC_004102)	TGATGGGAAGCTCCTACGGATTCCAATACTCACCAGGACAGCGGGTTGAATTCCTCGTGCAAGCGTGGAAGTCCAA
HCV1	TGATGGGAAGCTCCTACGGATTCCAATACTCACCAGGACAGCGGGTTGAATTCCTCGTGCAAGCGTGGAAGTCCAA
HCV2	T**A**ATGGG**GCCA**TCCTA**T**GG**G**TTCCAATACTC**T**CC**T**G**C**A**G**A**A**CGGGT**C**GA**T**TT**T**CTC**C**T**CA**AAGC**T**TGG**GGAAGT**AA
HCV3	**C**GATGGG**TCCTG**C**T**TA**T**GGATTCCAATACTC**G**CC**TCAG**CAGCGGGT**C**GAA**CGT**CT**GC**TG**A**A**GAT**GTGGA**CC**TC**A**AA
HCV4	TGATGGGA**GC**C**G**C**T**TACGG**C**TTCCAATACTCACCAG**CG**CAGCGGGT**C**GAAT**A**CCTC**T**TG**A**AAGC**C**TGGA**G**GTC**A**AA
HCV5	T**T**ATGGG**GCC**CTC**G**TA**T**GG**G**TT**T**CA**G**TACTC**C**CCAG**CG**CAGCGGGTTGAATTC**T**T**AC**TG**A**A**G**GCGTGGAAGTCCAA
HCV6	TGATGGGA**GCAG**C**A**TACGG**C**TTCCA**G**TACTC**C**CC**TAAG**CAG**A**GGGTTGA**G**T**A**C**T**T**GC**T**CA**AA**AT**GTGG**CGC**TC**A**AA
	7890 7900 7910 7920 7930 7940 7950 7960 7965
H77 (NC_004102)	GAAGACCCCGATGGGGTTCTCGTATGATACCCGCTGTTTTGACTCCACAGTCACTGAGAGCGACATCCGTACGGAG
HCV1	GAAGACCCC**A**ATGGGGTTCTC**A**TATGATACCCGCTG**C**TTTGACTCCACAGTCACTGAGAGCGACATCCGTACGGAG
HCV2	GAAG**GA**CCC**A**ATGGGGTTCTCGTATGA**C**ACCCGCTG**C**TTTGACTC**A**AC**C**GTCAC**G**GAGAG**G**GACAT**AA**G**A**AC**A**GAG
HCV3	GAA**A**ACCCC**CT**TGGGGTTCTCGTATGA**C**ACCCGCTG**C**TTTGACTC**G**AC**T**GTCACTGA**ACAG**GACATC**A**G**GGT**GGA**A**
HCV4	GAAG**GTT**CC**C**ATGGGGTTCTC**A**TATGA**C**ACCCGCTG**C**TTTGACTCCAC**T**GT**G**ACTGA**A**AG**G**GACATC**A**G**GGTC**GAG
HCV5	**A**AAGACCCC**C**ATGG**CC**TTCTC**C**TATGA**C**ACCCGCTG**C**TTTGACTC**A**AC**C**GT**T**AC**C**GA**ACAT**GACAT**AATG**AC**T**GA**A**
HCV6	GAAGAC**G**CC**T**ATGGG**C**TTCTC**T**TATGA**C**ACC**A**G**G**TGTTTTGACTC**A**ACAGTCAC**C**GAG**C**GCGACATCCG**G**AC**T**GAG
	7966 7970 7980 7990 8000 8010 8020 8030 8041
H77 (NC_004102)	GAGGCAATTTACCAATGTTGTGACCTGGACCCCCAAGCCCGCGTGGCCATCAAGTCCCTCACTGAGAGGCTTTATG
HCV1	GAGGCAAT**C**TACCAATGTTGTGACCTGGACCCCCAAGCCCGCGTGGCCATCAAGTCCCTCACTGAGAGGCTTTATG
HCV2	GA**AT**C**C**AT**A**TA**T**CA**GGC**TTGT**TC**CCTG**CCTGAGG**A**G**GCC**A**G**AACT**GCCAT**AC**A**C**TC**G**CTCACTGAGAG**A**CT**C**TA**C**G
HCV3	GAGG**AG**AT**A**TACCAATG**C**TGT**A**ACCT**T**GA**A**CC**GG**A**G**GCC**A**G**GAAA**G**TG**ATC**TCC**TCCCTCAC**G**GAG**C**GGCTTTA**CT**
HCV4	GAGG**AGG**T**C**TA**T**CA**G**TGTTGTGACCTGGA**G**CCC**G**AAGCCCGC**AA**GG**TA**AT**ATCCG**CCCTCAC**A**GAGAG**A**CT**C**TA**C**G
HCV5	GAG**T**C**C**ATTTACCAAT**CA**TGTGAC**T**TG**C**A**G**CC**TG**A**G**GC**G**CGCG**C**GGC**A**AT**ACG**GTC**A**CTCAC**CC**A**AC**G**C**CT**A**TA**CT**
HCV6	**C**A**C**G**AC**AT**C**TACCA**G**T**C**TTG**CC**A**G**CTGGACCC**AG**A**G**GCC**A**G**GAA**GGCCAT**A**A**CA**TCCCT**G**AC**A**GA**A**AGGCT**C**TA**C**G

Table S5. *Cont.*

	8042 8050 8060 8070 8080 8090 8100 8110 8117
H77 (NC_004102)	TTGGGGGCCCTCTTACCAATTCAAGGGGGGAAAACTGCGGCTACCGCAGGTGCCGCGCGAGCGGCGTACTGACAAC
HCV1	T**C**GGGGGCCCTCTTACCAATTCAAGGGGGGA**G**AACTGCGGCTA**T**CGCAGGTGCCGCGCGAGCGGCGTACTGAC**G**AC
HCV2	T**A**GG**A**GG**G**CC**CA**T**G**AC**A**AA**CAGC**A**A**GGGG**C**AA**TC**CTGCGG**T**TAC**A**G**GC**G**T**TGCCGCGC**A**AGCGG**T**GT**TT**T**C**AC**C**AC
HCV3	**GC**GGGGGCCCT**A**T**GTT**CAA**CAGC**A**A**GGGGG**CCC**A**G**TG**T**GG**T**TA**T**CGC**C**G**T**TGCCG**T**GC**C**AG**T**GG**A**GT**T**CTG**C**C**T**AC
HCV4	T**G**GG**C**GGCCC**CA**T**GTAT**AA**CAGC**A**A**GGG**A**GA**CCTT**TGCGG**G**TA**T**CG**G**AG**A**TGCCGCGC**A**AGCGGCGT**CTAC**AC**C**AC
HCV5	**G**TGG**A**GGCCC**CA**T**GTAT**AA**CAGC**A**A**GGGG**C**AA**C**A**A**TG**T**GG**T**TA**T**CG**T**AG**A**TGCCGCGC**C**AGCGGCGT**CT**T**C**AC**C**AC
HCV6	TTGG**T**GGCCC**CA**T**GTT**CAA**C**TCAA**A**GGG**CC**A**GTC**CTG**T**GGCTACCGCAG**A**TGCCGCGC**C**AG**T**GG**G**GT**G**CT**CC**C**C**AC
	8118 8130 8140 8150 8160 8170 8180 8193
H77 (NC_004102)	TAGCTGTGGTAACACCCTCACTTGCTACATCAAGGCCCGGGCAGCCTGTCGAGCCGCAGGGCTCCAGGACTGCACC
HCV1	TAGCTGTGGTAACACCCTCACTTGCTACATCAAGGCCC**CA**GCAGCCTGTCGAGCCGCAGGGCTCCAGGACTGCACC
HCV2	**C**AGC**ATG**GG**G**AACACC**A**T**G**AC**A**TGCTACATCAA**A**GCCC**TT**GCAGC**A**TG**CAA**AGC**T**GCAGGG**A**TC**GT**GGAC**CC**CAC**T**
HCV3	**C**AGCT**TC**GG**C**AACAC**AA**TCACTTG**T**TACATCAAGGCC**ACA**GC**G**GC**TGCAA**G**G**GCCGCAGG**C**CTCC**G**G**A**AC**CCGGA**C
HCV4	**C**AGCT**TC**GG**G**AACAC**A**CT**G**AC**G**TGCTA**TC**T**T**AAGGCC**ACA**GCAGCC**ACCA**G**G**GCCGCAGG**C**CT**AA**AGGACTGCACC
HCV5	TAG**TATG**GG**C**AACACC**A**T**G**AC**G**TGCTACAT**T**AAGGC**TTTA**GC**CT**CCTGT**A**GAGC**T**GCA**AA**GCTCC**G**GGACTGCAC**G**
HCV6	**C**AGC**ATG**GG**C**AACACC**A**TCAC**A**TGCTAC**C**T**G**AAA**A**GC**A**C**A**GGC**C**GCCTG**CA**G**G**GC**A**GCCGG**C**CTC**A**AGGACT**TTGA**C
	8194 8200 8210 8220 8230 8240 8250 8260 8269
H77 (NC_004102)	ATGCTCGTGTGTGGCGACGACTTAGTCGTTATCTGTGAAAGTGCGGGGGTCCAGGAGGACGCGGCGAGCCTGAGAG
HCV1	ATGCTCGTGTGTGGCGACGAC**C**TAGTCGTTATCTGTGAAAGTGCGGG**A**GTCCAGGAGGACGCGGCGAGCCTGAGAG
HCV2	ATGCT**G**GTGTGTGG**A**GACGAC**C**T**G**GTCGT**C**ATCT**CA**GA**G**AG**CCAA**GGG**AA**C**G**AGGAGGACG**A**G**CGA**A**A**CCTGAGAG
HCV3	**T**T**T**CT**T**GT**C**TG**C**GG**A**GA**T**GA**TC**T**G**GTCGT**GG**T**GGC**TGA**G**AGTG**AT**GG**C**GTC**G**AGGAGGA**TAGA**GC**AGC**CCTGAGAG
HCV4	ATGCT**G**GT**C**TG**C**GG**T**GACGACTTAGTCGTTATC**GCC**GAAAG**C**G**AT**GG**C**GT**GG**AGGAGGAC**AACCGAGC**CCT**CG**GAG
HCV5	**C**T**C**CT**G**GTGTGTGG**T**GACGAC**C**T**T**GT**G**G**CC**ATCTG**C**GA**G**AG**CCA**GGGG**ACA**CA**C**GAGGA**T**G**AA**GCGAGCCTGAGAG
HCV6	ATG**T**T**G**GT**C**TG**C**GG**A**GACGA**T**TT**G**GT**G**GT**C**AT**TT**GTGA**G**AGTGC**T**GG**C**GTCCAGGAGGAC**A**C**T**GC**TGC**CCTG**C**GAG

Table S5. *Cont.*

	8270 8280 8290 8300 8310 8320 8330 8340 8345
H77 (NC_004102)	CCTTCACGGAGGCTATGACCAGGTACTCCGCCCCCCCCGGGGACCCCCCACAACCAGAATACGACTTGGAGCTTAT
HCV1	CCTTCACGGAGGCTATGACCAGGTACTCCGCCCCCCCCGGGGACCCCCC**C**CAACCAGAATACGACTTGGAGCT**C**AT
HCV2	CCTTCACGGAGGCTATGACCAGGTA**T**TCCGCCCC**T**CCCGG**T**GACC**TT**CC**CAG**ACC**G**GAATA**T**GACTTGGAGCTTAT
HCV3	CCTTCACGGAGGCTATGACCAGGTA**T**TC**T**GC**T**CC**A**CCCGG**A**GA**TG**C**T**CCACA**G**CC**CACC**TACGAC**C**T**T**GAGCT**C**AT
HCV4	CCTTCACGGAGGCTATGAC**G**AGGTACTC**G**GC**T**CCCCCCGG**A**GAC**G**CCCC**G**CAACCAG**C**ATA**T**GAC**C**TGGAGCT**C**AT
HCV5	CCTTCACGGAGGCTATGACCAGGTACTC**T**GC**T**CCCCC**G**GG**T**GA**T**CCCCC**GGTT**CC**T**G**CT**TA**T**GAC**C**TGGAGCT**CG**T
HCV6	C**A**TTCACGGA**T**GCTATGACCAGGTACTC**A**GC**T**CCCCC**T**GG**A**GAC**GAA**CC**G**CA**C**CCA**ACG**TA**T**GAC**C**TGGAGCT**G**AT
	8346 8350 8360 8370 8380 8390 8400 8410 8421
H77 (NC_004102)	AACATCATGCTCCTCCAACGTGTCAGTCGCCCACGACGGCGCTGGAAAGAGGGTCTACTACCTTACCCGTGACCCT
HCV1	AACATCATGCTCCTCCAACGTGTCAGTCGCCCACGACGGCGCTGGAAAGAGGGTCTACTACCT**C**ACCCGTGACCC**C**
HCV2	AACATC**C**TGCTCCTC**A**AACGT**A**TC**G**GT**A**GC**G**C**TG**GAC**CCTCGG**GG**TCGCC**G**CCGG**TACTACCT**A**ACC**A**G**A**GACCCT
HCV3	**T**ACATC**T**TGCTCCTCCAACGT**C**TC**C**GT**G**GC**A**C**GG**GACG**A**C**AAG**GG**G**AAGAGG**TA**CTA**T**TACCT**C**ACCCGTGA**TG**C**C**
HCV4	AACATCATGCTC**A**TCCAA**T**GT**C**TC**G**GTCGC**A**CACGACG**CGA**C**C**GG**C**AAGAGGGTCTACTACCT**G**ACCCG**C**GACCCT
HCV5	AACATC**T**TGCTCCTC**A**AACGTGTC**C**GTCGCCC**G**CGA**T**G**CTT**C**A**GG**C**AA**C**AG**A**GT**T**TACTACCT**C**AC**G**CG**C**GACCC**C**
HCV6	AACATC**G**TGCTCCTCCAACGT**C**TC**C**GT**A**GCCCACGACGGC**A**CTGGAAAGAG**ATAT**TACTACCT**C**AC**A**CGTGACCC**A**
	8422 8430 8440 8450 8460 8470 8480 8490 8497
H77 (NC_004102)	ACAACCCCCCTCGCGAGAGCCGCGTGGGAGACAGCAAGACACACTCCAGTCAATTCCTGGCTAGGCAACATAATCA
HCV1	ACAACCCCCCTCGCGAGAGC**T**GCGTGGGAGACAGCAAGACACACTCCAGTCAATTCCTGGCTAGGCAACATAATCA
HCV2	AC**C**AC**T**CC**AA**TCGC**CC**GAGC**T**GC**T**TGGGA**A**ACAG**T**AAGACAC**T**C**C**CC**T**GTCAATTC**T**TGGCT**G**GG**A**AACAT**C**ATC**C**
HCV3	AC**T**AC**T**CCCCT**G**GC**CC**G**T**GC**G**GC**T**TGGGAGACAGC**TC**G**T**CACACTCCAGT**T**AA**C**TCCTGG**T**T**G**GGCAACAT**C**ATCA
HCV4	**GAG**AC**T**CCCCT**G**GC**AC**GAGC**T**GC**C**TGGGAGACAGC**CC**GACACACTCCAGTCAA**C**TCCTGG**T**T**G**GG**G**AACAT**C**AT**AC**
HCV5	**CA**A**GTA**CC**A**CT**T**GCGAG**G**GCCGCGTGGGA**A**AC**T**GC**C**A**A**ACAC**T**C**C**CC**G**GT**T**AA**C**TCCTGG**T**TAGG**G**AACAT**C**ATCA
HCV6	AC**C**AC**T**CC**A**CT**T**GCG**C**G**G**GCCGC**T**TGGGAGACAGC**CC**G**C**CACACTCCAGTCAATTC**G**TGG**T**T**G**GGCAACAT**C**AT**T**A

Table S5. *Cont.*

	8498 8510 8520 8530 8540 8550 8560 8573
H77 (NC_004102)	TGTTTGCCCCCACACTGTGGGCGAGGATGATACTGATGACCCATTTCTTTAGCGTCCTCATAGCCAGGGATCAGCT
HCV1	TGTTTGCCCCCACA**T**TGTGGGCGAGGATGATACTGATGACCCA**C**TTCTTCAGCGTCCTCATAGCCAGGGATCAGCT
HCV2	**AA**T**AC**GCCCC**T**ACA**A**T**C**TGGG**TCC**GGATG**G**T**CA**T**A**ATGACCCA**C**TTCTTC**TC**C**A**T**A**CT**AT**T**G**GCCC**CA**GGA**CACT**CT
HCV3	TGT**AC**GC**G**CC**T**AC**CA**T**C**TGGG**T**G**C**G**C**ATG**G**TA**A**TGATGAC**A**CA**C**TT**T**TTC**TC**C**A**T**A**CTC**CA**A**T**CCC**CA**GGA**GATA**CT
HCV4	T**C**T**AC**GC**G**CCCAC**CA**T**A**TGGG**T**G**C**G**C**ATG**G**TA**T**TGATGACCCA**C**TTCTTC**TCAA**T**A**CTC**CA**A**AG**C**CA**GGA**AGCC**CT
HCV5	TGT**AC**GC**G**CC**G**AC**C**CTGTGGGC**TC**GGAT**AG**T**G**CTGATGAC**G**CA**C**TTCTTCAGCGT**A**CT**GCAGAG**C**CA**GGA**G**CA**A**CT
HCV6	TGT**A**TGCCCCCAC**GA**T**A**TGGG**T**G**C**G**C**ATG**G**T**T**CTGATGACCCATTTCTTC**TC**C**A**T**A**CTC**CAG**GC**GCA**GGA**A**CAGCT
	8574 8580 8590 8600 8610 8620 8630 8640 8649
H77 (NC_004102)	TGAACAGGCTCTTAACTGTGAGATCTACGGAGCCTGCTACTCCATAGAACCACTGGATCTACCTCCAATCATTCAA
HCV1	TGAACAGGC**C**CTT**G**A**T**TG**C**GAGATCTACGG**G**GCCTGCTACTCCATAGAACCACTGGA**C**CTACCTCCAATCATTCAA
HCV2	**GA**A**C**CA**AAA**TCT**C**AA**TTT**TGAGAT**G**TACGG**G**GC**AGTA**TA**T**TC**GG**T**CA**A**T**CCA**T**TGGA**C**CTACC**AG**C**C**ATA**A**TT**G**AA
HCV3	TGA**T**C**GAC**C**C**CTT**G**ACT**T**TGA**A**AT**G**TACGG**G**GCC**ACT**TACTC**TG**T**CACT**CC**G**CTGGAT**T**TACC**AG**CAATCATT**G**AA
HCV4	TGAA**A**A**A**GC**A**CT**CG**ACT**TC**GA**C**AT**G**TACGGAG**T**C**ACA**TACTC**T**AT**CACT**CC**G**CTGGATCT**G**CC**AG**C**C**ATA**A**TTCAA
HCV5	**G**GAA**A**A**AA**C**C**CT**AGCA**T**T**TGA**A**AT**G**TA**T**GG**GT**C**AGT**CTACTC**TG**T**CACT**CC**G**CTGGATCT**T**CC**GGCT**ATCATTCA**G**
HCV6	**G**GA**CA**A**A**GC**A**CT**CG**ACT**TC**GA**C**ATCTACGGAG**T**C**AC**CTA**T**TC**AG**T**CACT**CCACT**T**GATCT**C**CC**AG**CAATCATTCAA
	8650 8660 8670 8680 8690 8700 8710 8720 8725
H77 (NC_004102)	AGACTCCATGGCCTCAGCGCATTTTCACTCCACAGTTACTCTCCAGGTGAAATCAATAGGGTGGCCGCATGCCTCA
HCV1	AGACTCCATGGCCT**T**AGCGCATTTTCACTCCACAGTTACTCTCCAGGTGAAATCAATAGGGTGGCCGCATGCCTCA
HCV2	AG**G**CT**A**CATGG**G**CT**TGA**CGC**C**TTTTCACT**G**CACA**CA**TACTCTCC**CCAC**GAA**C**TC**TCAC**GGGTGGC**A**GCA**ACT**CTCA
HCV3	AGACTCCATGG**T**CT**A**AGCGC**G**TT**CA**C**G**CTCCACAGTTACTCTCCAG**TA**GA**GC**TCAATAGGGT**C**GC**G**G**GGACA**CTCA
HCV4	AGACTCCATGGC**T**T**G**AGCGCATTT**A**CACT**G**CAC**G**G**A**TACTCTCCA**CAC**GAA**C**TCAAT**C**GGGTGGC**A**G**G**A**A**GCCTCA
HCV5	AGACTCCATGG**A**CT**T**AGCGC**G**TTTTCACTCCA**TTCA**TACTCTCC**GAGC**GAAATCAATAGGGTGGC**TAGT**TGCCTCA
HCV6	**C**GACTCCATGGC**A**T**GGC**CGC**T**TTTTCACTCCA**TG**G**A**TACTCTCCAGGTGAA**C**TCAAT**C**GGGTGG**GA**GCATGCCTCA

Table S5. *Cont.*

	8726 8730 8740 8750 8760 8770 8780 8790 8801
H77 (NC_004102)	GAAAACTTGGGGTCCCGCCCTTGCGAGCTTGGAGACACCGGGCCCGGAGCGTCCGCGCTAGGCTTCTGTCCAGAGG
HCV1	G**G**AAACTTGGGGTCCCGCCCTTGCGAGCTTGGAGACACCGGGCCCGGAG**T**GTCCGCGCTA**A**GCTTCTGTCCAGAGG
HCV2	GAAAACTTGG**A**G**CG**CC**T**CCC**C**T**TA**GAGC**G**TGGA**AGAGT**CGGGC**G**CG**TGCT**GT**GA**G**G**GC**CTCA**CT**CA**T**CG**CC**CAG**--
HCV3	G**G**AA**G**CTTGGG**TG**CCCCCCC**C**T**A**CGAGCTTGGAGACA**T**CGGGC**A**CG**AGCA**GT**G**CGCGC**C**A**A**GCTT**A**T**CG**CC**CAG**GG
HCV4	G**G**AAACTTGGGGT**A**CCCCC**A**TTG**A**GAGC**G**TGGAGACA**T**CGGGCCCG**AGCA**GTCCGCGC**C**A**A**GCT**CA**T**CG**CC**CAG**GG
HCV5	G**G**AA**G**CTTGGGGT**A**CCCCC**T**TTG**A**GAGCTTGGAGACA**T**CGGGCTCG**AGCT**GT**A**CGCGCTA**A**GCT**CA**T**CG**CC**CAG**GG
HCV6	G**G**AAACTTGGGG**CA**CC**T**CCCTTG**A**GAGC**C**TGGAGACA**T**CG**A**GCC**A**G**AGCG**GTC**A**G**A**GC**C**A**A**GCT**CA**T**TG**CC**CAG**GG
	8802 8810 8820 8830 8840 8850 8860 8870 8877
H77 (NC_004102)	AGGCAGGGCTGCCATATGTGGCAAGTACCTCTTCAACTGGGCAGTAAGAACAAAGCTCAAACTCACTCCAATAGCG
HCV1	AGGCAGGGCTGCCATATGTGGCAAGTACCTCTTCAACTGGGCAGTAAGGACAAAGCTCAAACTCACTCCAATAGC**G**
HCV2	--
HCV3	AGG**G**A**A**GGC**CAAA**ATATG**C**GGC**CTT**TA**T**CTCTT**T**AA**T**TGGGC**G**GTA**C**G**C**AC**C**AAG**AC**CAAACTCACTCCA**T**T**GC**CA
HCV4	AGG**G**AG**A**GC**CAGA**AT**C**TGTGGCA**TA**TACCTCTT**T**AACTGGGC**G**GTAA**AA**AC**C**AAA**A**CTCAAACTCACTCCA**T**T**GC**C**C**
HCV5	AGG**T**AGGGC**C**GCCAT**C**TG**C**GGCA**TC**TA**T**CTCTTCAACTGGGC**G**GT**G**A**A**GACAAA**A**C**G**CAAACTCACTCCA**T**TAGC**T**
HCV6	**G**GG**G**A**AA**GC**C**GC**T**ATATG**C**GGCAAGTACCTCTTCAACTGGGC**G**GT**G**A**A**GAC**C**AAGCTCAAACTCACTCCA**T**T**GCGC**
	8878 8890 8900 8910 8920 8930 8940 8953
H77 (NC_004102)	GCCGCTGGCCGGCTGGACTTGTCCGGTTGGTTCACGGCTGGCTACAGCGGGGGAGACATTTATCACAGCGTGTCTC
HCV1	GCCGCTGGCC**A**GCTGGACTTGTCCGGCTGGTTCACGGCTGGCTACAGCGGGGGAGACATTTATCACAGCGTGTCTC
HCV2	--
HCV3	GCCGCTGGCC**AGT**TGGA**T**TT**A**TCC**A**GCTGGTT**T**ACGG**T**TGGC**GT**C**G**GCGGG**AAC**GACATTTATCACAGCGTGTC**A**C
HCV4	GC**T**GCTG**C**C**AAA**CTCGACTTGTC**GA**G**T**TGGTT**T**ACGG**TG**GGC**GC**C**G**GCGGGGG**G**GACATTTATCACAGCGTGTC**C**C
HCV5	G**A**CGCTG**A**CCGGCTGGACTTGTCC**A**GCTGGTTCAC**C**G**T**TGGC**GCTG**GCGGGGG**G**GACATTTATCACAGC**A**TGTC**C**C
HCV6	GCCGC**GAC**C**AAC**CT**T**GACTTGTC**A**GGCTGGTTC**GT**GGC**A**GGCTACAGCGGGGG**G**GACATTTATCACAGCGTGTC**C**C

Table S5. *Cont.*

	8954 8960 8970 8980 8990 9000
H77 (NC_004102)	ATGCCCGGCCCCGCTGGTTCTGGTTTTGCCTACTCCTGCTCGCTGCA
HCV1	**G**TGCCCGGCCCCGCTGGTTCTGGTTTTGCCTACTCCTGCT**T**GCTGCA
HCV2	--
HCV3	**G**TGCCCG**AA**CCCGC**CAT**TT**GCT**G**C**TTTGCCTACTCCT**A**CT**AA**C-G**T**A
HCV4	**G**TGCCCG**A**CCCCGCT**AT**TT**ACTCC**T**G**TGCCTACTCCT**A**CT**TT**C**C**G**T**A
HCV5	**G**TGCCCG**A**CCCCGCT**AC**TT**ACTCC**T**G**TGCCTACTCCT**A**CT**TAGC**G**T**A
HCV6	**GG**GC**T**CG**A**CCCCGC**ATA**TT**ACTCC**T**G**TGCCTACTCCT**A**CT**CA**C**C**G**T**A

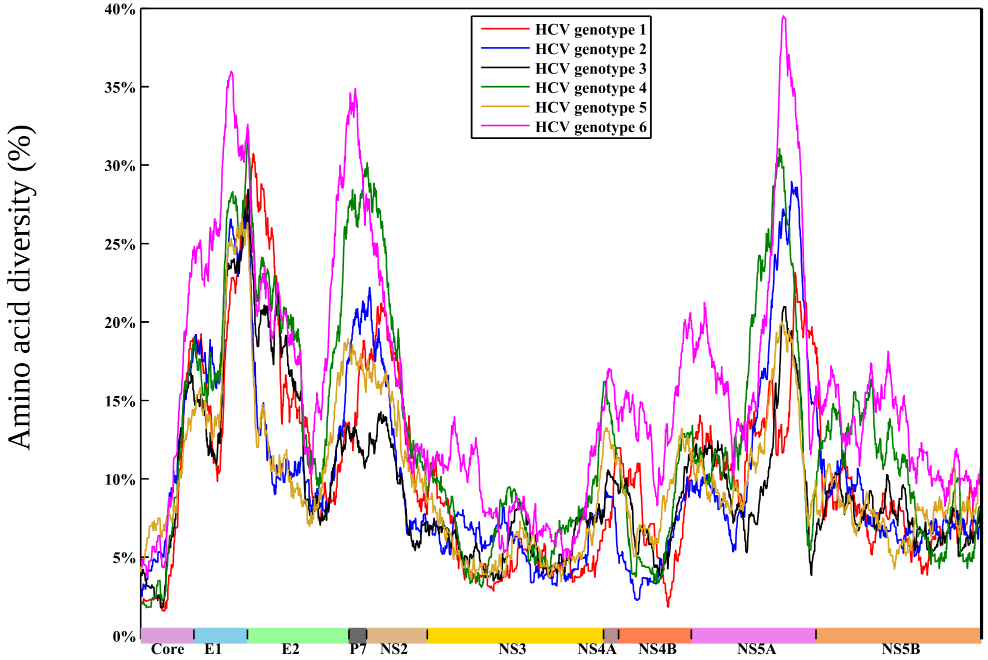

Figure S1. Full-genome sliding window plot for within-genotype amino acid diversity. A sliding window of 100 amino acid positions with a step size of one amino acid was used. The six genotypes were plotted separately in color-coded solid lines.

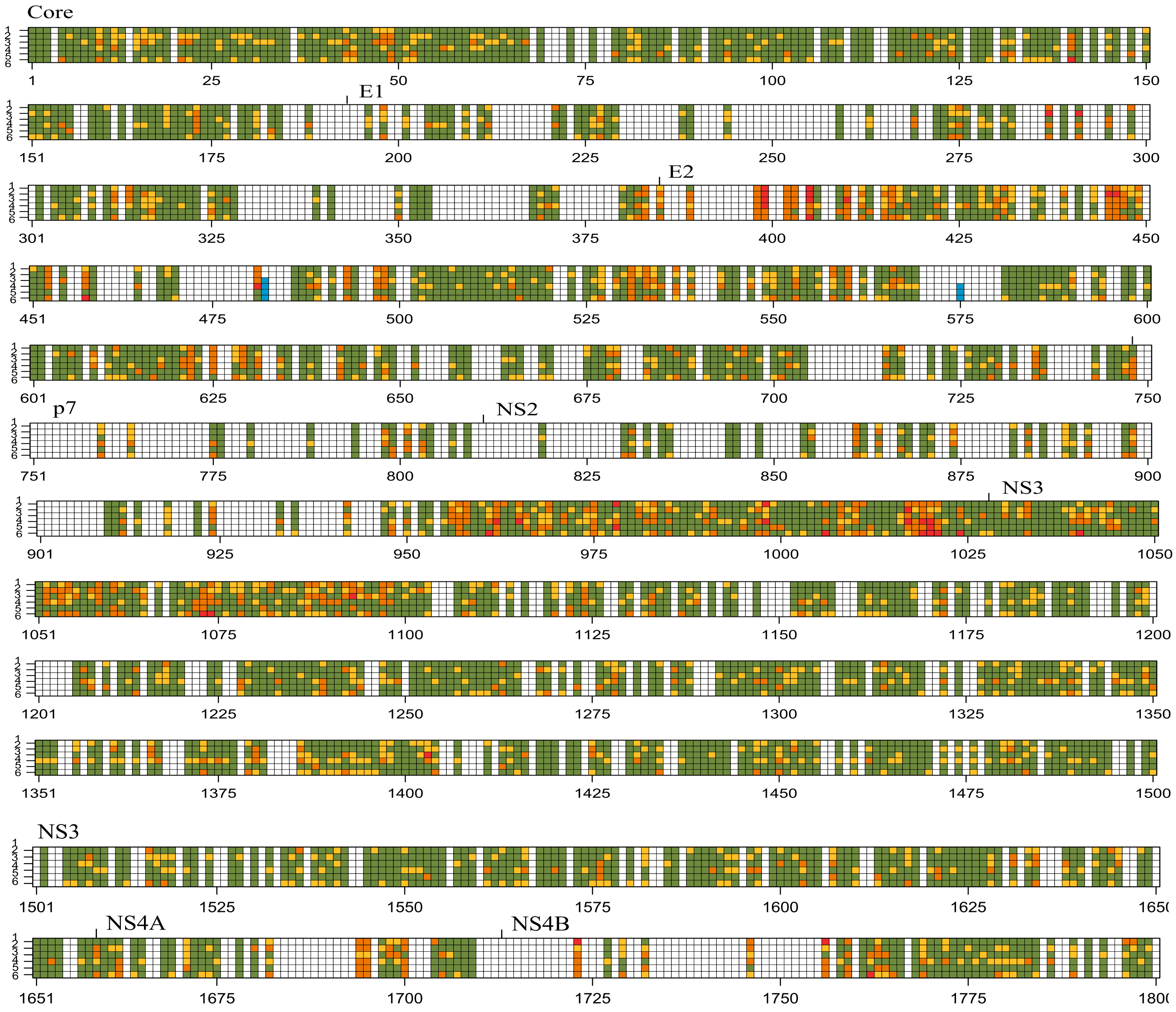

Figure S2. *Cont.*

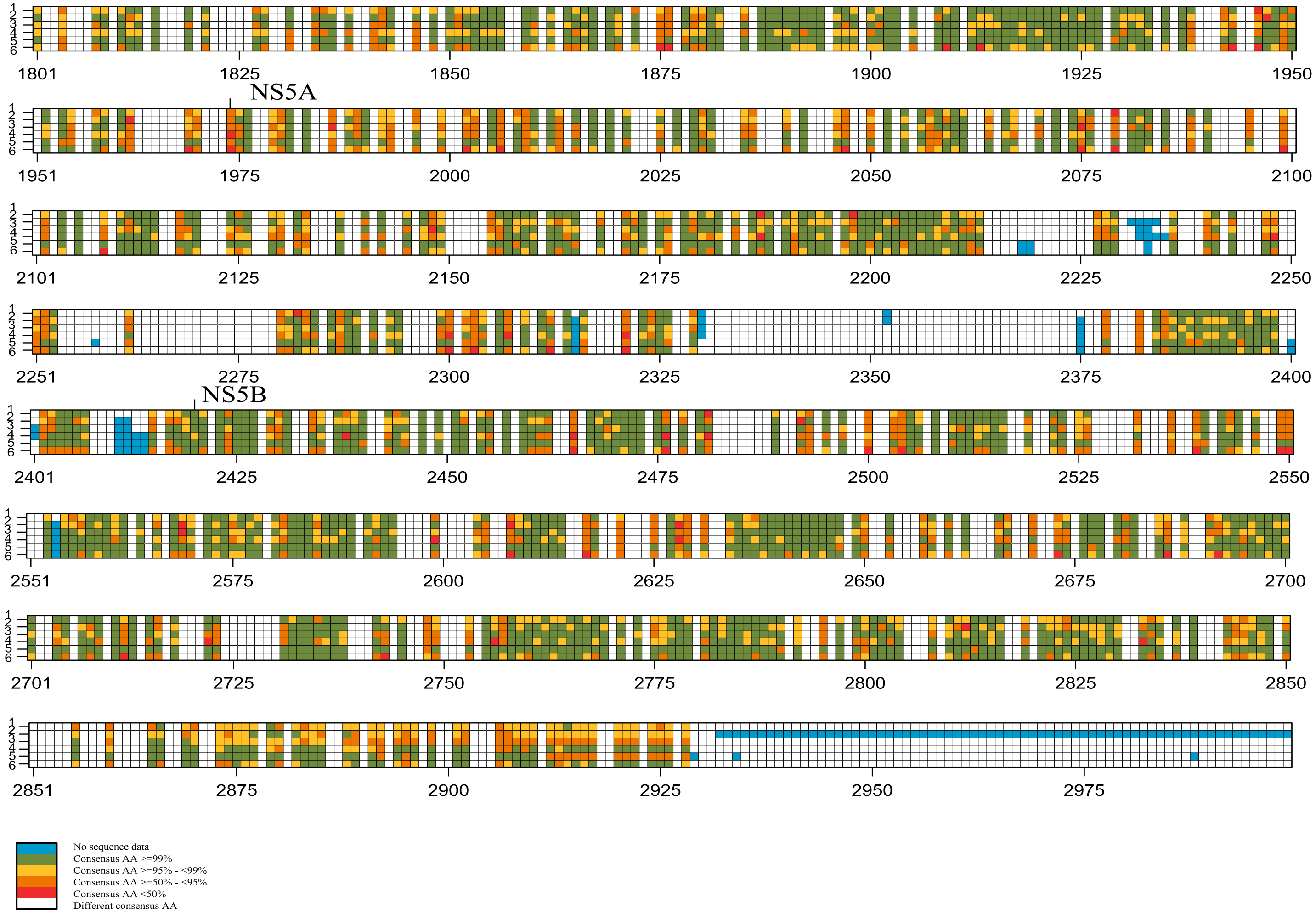

Figure S2. Discretized frequencies of pan-genotypic consensus positions in the HCV full-genome, on amino acid level. The distribution of positions that shared a consensus amino acid across genotypes 1-6, aligned against the general reference sequence H77, is shown for the whole HCV genome. HCV genotype 1 is placed at the top and each square represents a single position. Positions that shared a consensus amino acid across all six genotypes were colored according to the frequency of the consensus amino acid in the respective genotype (for frequency x: category x<50% in red, 50% ≤ x < 95% in orange, 95% ≤ x < 99% in yellow and x ≥ 99% in green). Positions with different consensus amino acids were colored white and positions with no sequence data or a deletion were indicated in blue. It can be seen that HCV2 sequences of NS5B are shorter compared to other HCV genotypes.

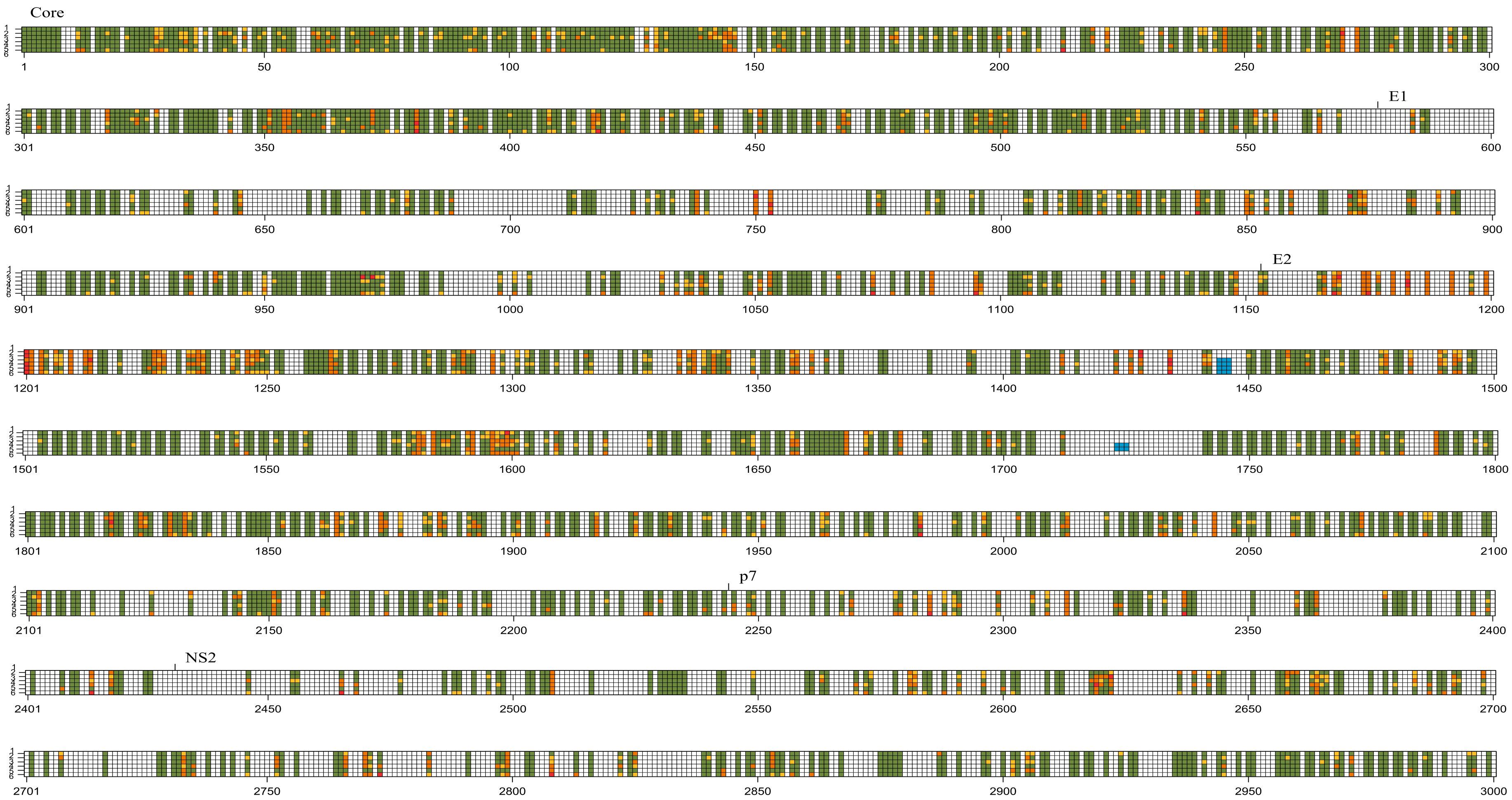

Figure S3. *Cont.*

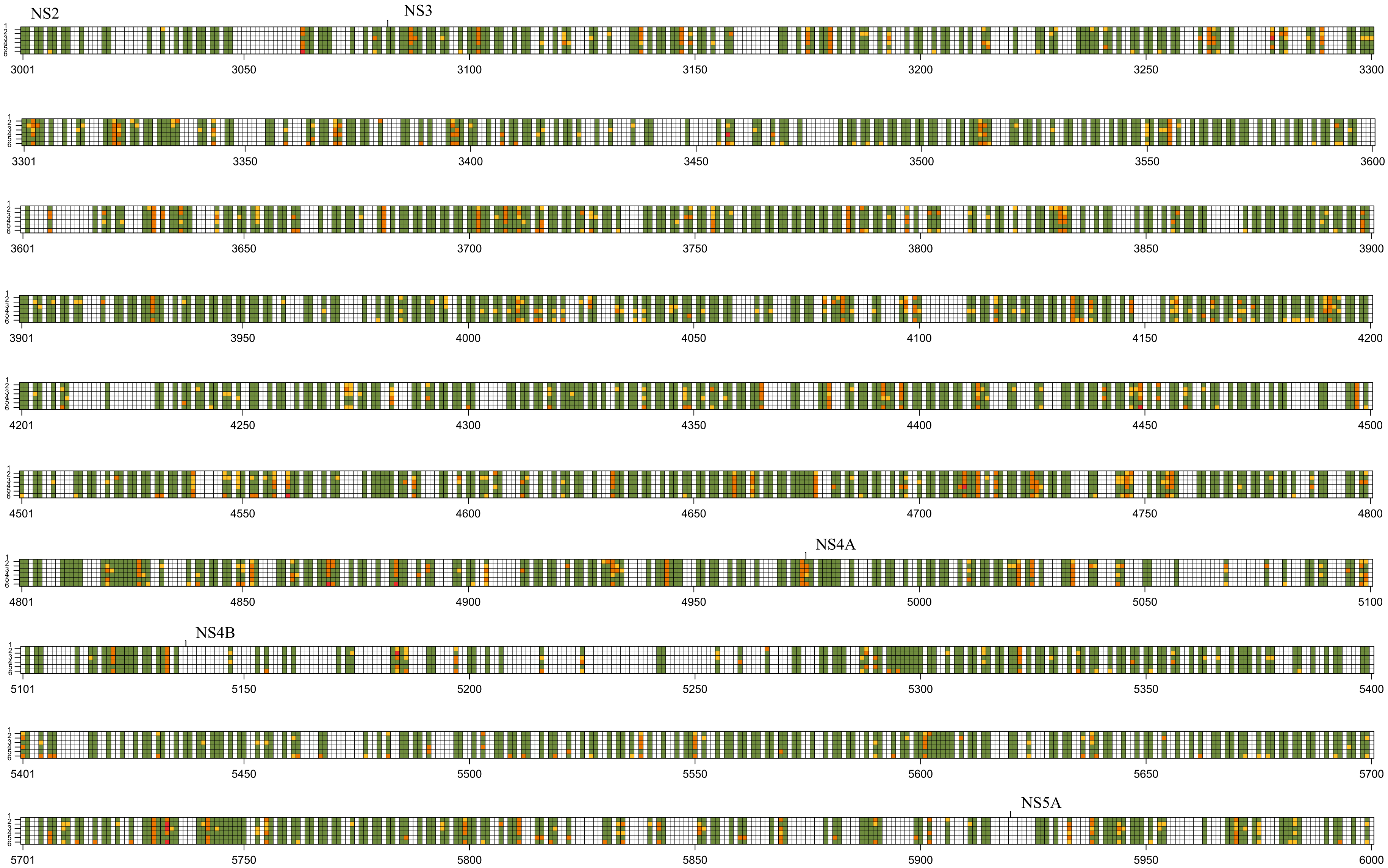

Figure S3. *Cont.*

Figure S3. Discretized frequencies of pan-genotypic consensus positions in the HCV full-genome, on nucleotide level. The distribution of positions that shared a consensus nucleotide across genotypes 1–6, aligned against the general reference sequence H77 , is shown for the whole HCV genome. Genotype 1 is placed at the top and each square represents a single position. Positions that shared a consensus nucleotide in all six genotypes were colored according to the frequency of the consensus nucleotide in the respective genotype (for frequency x: category x < 50% in red, 50% ≤ x < 95% in orange, 95% ≤ x < 99% in yellow and x ≥ 99% in green). Positions with different consensus nucleotides were colored white and positions with no sequence data or a deletion were indicated in blue. It can be seen that HCV2 sequences of NS5B are shorter compared to other genotypes.

Table S6. Amino acid alignment of the H77 (NC_004102) reference sequence with the consensus of all six HCV genotypes. For each genotype, a consensus alignment was obtained, based on the most frequently occurring amino acids in the respective datasets. Consensus amino acids indicated in bold, highlight positions that display a different consensus amino acid compared to reference sequence H77.

	1 10 20 30 40 50 60 70 80
H77 (NC_004102)	MSTNPKPQRKTKRNTNRRPQDVKFPGGGQIVGGVYLLPRRGPRLGVRATRKTSERSQPRGRRQPIPKARRPEGRTWAQPG
HCV1	MSTNPKPQRKTKRNTNRRPQDVKFPGGGQIVGGVYLLPRRGPRLGVRATRKTSERSQPRGRRQPIPKARRPEGRTWAQPG
HCV2	MSTNPKPQRKTKRNTNRRPQDVKFPGGGQIVGGVYLLPRRGPRLGVRATRKTSERSQPRGRRQPIPK**D**RR**ST**G**KS**W**GK**PG
HCV3	MST**L**PKPQRKTKR**I**TNRRPQDVKFPGGGQIVGGVY**V**LPRRGPRLGVRATRKTSERSQPRGRRQPIPKARR**S**EGR**S**WAQPG
HCV4	MSTNPKPQRKTKRNTNRRP**M**DVKFPGGGQIVGGVYLLPRRGPRLGVRATRKTSERSQPRGRRQPIPKARRPEGR**S**WAQPG
HCV5	MSTNPKPQRKTKRNTNRRPQDVKFPGGGQIVGGVYLLPRRGPRLGVRATRKTSERSQPRGRRQPIPKAR**Q**P**T**GR**S**W**G**QPG
HCV6	MST**L**PKPQRKTKRNTNRRP**M**DVKFPGGGQIVGGVYLLPRRGPRLGVRATRKTSERSQPRGRRQPIPKAR**Q**P**T**GR**H**WAQPG
	Core
	81 90 100 110 120 130 140 150 160
H77 (NC_004102)	YPWPLYGNEGCGWAGWLLSPRGSRPSWGPTDPRRRSRNLGKVIDTLTCGFADLMGYIPLVGAPLGGAARALAHGVRVLED
HCV1	YPWPLYGNEGCGWAGWLLSPRGSRPSWGPTDPRRRSRNLGKVIDTLTCGFADLMGYIPLVGAPLGGAARALAHGVRVLED
HCV2	YPWPLYGNEGCGWAGWLLSPRGSRP**T**WGPTDPR**H**RSRNLGKVIDTLTCGFAD**I**MGYIPLVGAP**V**GG**V**ARALAHGVRVLED
HCV3	YPWPLYGNEGCGWAGWLLSPRGSRPSWGP**N**DPRRRSRNLGKVIDTLTCGFADLMGYIPLVGAP**V**GG**V**ARALAHGVR**A**LED
HCV4	YPWPLYGNEGCGWAGWLLSPRGSRPSWGP**N**DPRRRSRNLGKVIDTLTCGFADLMGYIPLVGAP**V**GG**V**ARALAHGVR**AV**ED
HCV5	YPWPLY**A**NEG**L**GWAGWLLSPRGSRP**N**WGP**N**DPRR**K**SRNLGKVIDTLTCGFADLMGYIPLVG**G**P**V**GG**V**ARALAHGVRVLED
HCV6	YPWPLYGNEGCGWAGWLLSPRGSRP**H**WGP**N**DPRRRSRNLGKVIDTLTCG**L**ADLMGYIPLVGAPLGG**V**A**A**ALAHGVR**AI**ED
	16 170 180 190 200 210 220 230 240
H77 (NC_004102)	GVNYATGNLPGCSFSIFLLALLSCLTVPASAYQVRNSSGLYHVTNDCPNSSIVYEAADAILHTPGCVPCVREGNASRCWV
HCV1	GVNYATGNLPGCSFSIFLLALLSCLTVPASAYQVRNSSGLYHVTNDCPNSSIVYEAADAILHTPGCVPCVREGN**S**SRCWV
HCV2	G**I**NYATGNLPGCSFSIFLLALLSC**I**TVP**V**SA**VE**VRN**I**S**SS**Y**YA**TNDC**S**N**N**SI**TWQLTN**A**V**LH**L**PGCVPC**ENDNGTL**RCW**I**
HCV3	G**I**N**F**ATGNLPGCSFSIFLLAL**F**SCL**IH**PA**ASLEW**RN**T**SGLY**VL**TNDC**S**NSSIVYEA**D**D**V**ILHTPGCVPCV**QD**GN**T**S**T**CW**T**
HCV4	G**I**NYATGNLPGCSFSIFLLALLSCLTVPASA**VHY**RN**A**SG**I**YH**I**TNDCPNSSIVYEA**DHH**ILH**L**PGCVPCVR**T**GN**Q**SRCWV
HCV5	GVNYATGNLPGCSFSIF**I**LALLSCLTVPASA**VPY**RN**A**SG**V**YHVTNDCPNSSIVYEA**DNL**ILH**A**PGCVPCVREGN**V**SRCWV
HCV6	G**I**NYATGNLPGCSFSIFLLALLSCLT**T**PASA**VHYG**NSSG**I**YH**L**TNDCPNSSIVYEA**DAM**ILH**L**PGCVPCVR**V**GN**Q**SRCW**H**
	Core∣E1
	241 250 260 270 280 290 300 310 320
H77 (NC_004102)	AVTPTVATRDGKLPTTQLRRHIDLLVGSATLCSALYVGDLCGSVFLVGQLFTFSPRRHWTTQDCNCSIYPGHITGHRMAW
HCV1	A**L**TPTVATRDGKLPTTQLRRHIDLLVGSATLCSALYVGDLCGSVFLVGQLFTFSPRRHWTTQDCNCSIYPGHITGHRMAW
HCV2	**Q**VTP**N**VA**VKHRGAL**T**HN**LR**T**H**V**D**MIVMA**AT**V**CSALYVGD**V**CG**A**V**MI**V**S**Q**A**F**IV**SP**Q**RH**NF**TQ**E**CNCSIY**Q**GHITGHRMAW
HCV3	**P**VTPTVA**V**R**YVGATT**T**ASI**R**S**H**V**DLLVG**A**AT**M**CSALYVGD**M**CG**A**VFLVGQ**A**FTF**R**PRRH**Q**T**V**Q**T**CNCS**L**YPGH**L**TGHRMAW
HCV4	A**L**TPTVA**APYLGA**P**LES**LRRH**V**DL**M**VG**A**ATLCSALYVGDLCG**GA**FLVGQ**M**FTF**Q**PRRHWTTQDCNCSIY**T**GHITGHRMAW
HCV5	**QI**TPTV**SAPSFGAV**T**AP**LRR**AV**D**Y**L**A**G**G**A**A**LCSALYVGD**A**CG**A**VFLVGQ**M**FT**YR**PR**Q**H**T**T**V**QDCNCSIY**S**GHITGHRMAW
HCV6	**P**V**S**PT**L**A**VPNAST**P**ATGF**RRH**V**DLLVG**A**A**AV**CSALY**I**GDLCG**G**VFLVGQLFTF**R**PRRHWT**V**QDCNCSIY**T**GH**V**TGHRMAW

Table S6. *Cont.*

	Core|E1
	321 330 340 350 360 370 380 390 400
H77 (NC_004102)	DMMMNWSPTAALVVAQLLRIPQAIMDMIAGAHWGVLAGIAYFSMVGNWAKVLVVLLLFAGVDAETHVTGGSAGRTTAGLV
HCV1	DMMMNWSPT**T**ALVVAQLLRIPQAI**L**DMIAGAHWGVLAGIAYFSMVGNWAKVLVVLLLFAGVDAETHVTGGSA**A**RTT**S**GL**T**
HCV2	DMM**L**NWSPT**LTMIL**A**YAA**R**V**P**ELVLEI**I**F**G**G**HWGV**MF**G**L**AYFSM**Q**G**A**WAKV**IAI**LLL**V**AGVDA**T**T**YS**TGG**Q**AGRTT**S**GL**A**
HCV3	DMMMNWSP**AVGM**VVA**HV**LR**L**PQ**TLF**D**I**IAGAHWG**I**LAG**L**AY**Y**SM**Q**GNWAKV**AIIMVM**F**S**GVDA**T**T**YT**TGGSA**A**RT**AR**GL**T**
HCV4	DMMMNWSPT**TT**LV**L**AQL**M**RIP**S**A**LV**DM**L**AG**G**HWGVLAG**L**A**F**FSM**QA**NWAKV**IL**VL**F**LFAGVDAETHVTGG**A**AGRT**AS**GL**T**
HCV5	DMMMNWSPT**T**AL**LM**AQLLRIPQ**VVI**D**I**IAG**G**HWGVL**FAA**AYF**ASAA**NWAKV**AL**VL**F**LFAGVDAETH**TV**GGSA**AQGAG**GL**A**
HCV6	DMMMNWSPT**TTY**V**LSSI**LR**V**PQ**ILLEIFL**G**G**HWGVL**GAVL**YFSMVGNWAKVL**A**VLLLFAGVDA**T**T**TT**TG**SAVAR**TT**S**GLT
	E1|E2
	401 410 420 430 440 450 460 470 480
H77 (NC_004102)	GLLTPGAKQNIQLINTNGSWHINSTALNCNESLNTGWLAGLFYQHKFNSSGCPERLASCRRLTDFAQGWGPISYANGSGL
HCV1	**S**L**FS**PGAKQNIQLINTNGSWHIN**R**TALNCN**D**SLNTGWLAGLFY**Y**HKFNSSGCPER**M**ASCR**P**LTDFAQGWGPISYANGSG**P**
HCV2	GL**FS**PG**PQ**QNIQLINTNGSWHIN**R**TALNCN**D**SL**Q**TG**FI**A**S**LFY**T**HKFNSSGCPERL**S**SCR**G**L**D**DF**RI**GWG**TLE**Y**ETTN**G**P**
HCV3	**S**L**FS**PGA**Q**QN**L**QL**V**NTNGSWHINSTALNCN**D**S**I**NTG**FI**AGLFY**Y**HKFNS**T**GCP**Q**RL**S**SC**KPI**T**F**F**K**QGWGP**LTD**ANG**PSD**
HCV4	**S**L**F**TPG**SR**QN**L**QLINTNGSWHIN**R**TALNCN**D**SLNTG**F**LAGLFY**A**HKFNSSGCPERLASC**K**RL**D**DF**P**QGWGP**LGV**ANG**PSD**
HCV5	**S**L**F**TPG**PQ**QN**L**QLINTNGSWHIN**R**TALNCN**D**SL**Q**TG**FI**AGL**L**Y**Y**HKFNSSGCPER**M**ASC**KP**L**AA**F**D**QGWG**T**ISYANG**PSD**
HCV6	GL**FS**PGAKQN**L**QLINTNGSWHIN**R**TALNCN**D**SL**Q**TG**FI**AGLFY**Y**HKFNSSGCPER**MS**SC**KP**LTDF**D**QGWGPI**T**YANG**PSS**
	481 490 500 510 520 530 540 550 560
H77 (NC_004102)	DERPYCWHYPPRPCGIVPAKSVCGPVYCFTPSPVVVGTTDRSGAPTYSWGANDTDVFVLNNTRPPLGNWFGCTWMNSTGF
HCV1	D**Q**RPYCWHYPP**K**PCGIVPAKSVCGPVYCFTPSPVVVGTTDRSGAPTY**N**WG**E**N**E**TDVFVLNNTRPPLGNWFGCTWMNSTGF
HCV2	**D**E**DM**RCWHYPP**K**PCGIVPA**RT**VCGPVYCFTPSPVVVGTTDR**Q**G**V**PTY**T**WG**E**N**E**TDVF**L**LN**S**TRPP**Q**G**A**WFGCTWMN**G**TGF
HCV3	D**-**RPYCWHY**A**PRPC**DT**VPA**S**SVCGPVYCFTPSPVVVGTTD**AK**GAPTY**T**WG**E**N**E**TDVF**L**L**ESL**RPP**S**G**R**WFGCTWMNSTGF
HCV4	D**-**RPYCWHY**A**PRPCG**V**VPA**ST**VCGPVYCFTPSPVVVGTTDR**L**G**V**PTY**T**WG**E**N**E**TDVF**I**LN**S**TRPP**G**G**A**WFGCTWMNSTGF
HCV5	D-**K**PYCWHYPPRPCG**V**VPA**RD**VCGPVYCFTPSPVVVGTTDR**R**G**C**PTY**N**WG**E**N**E**TD**I**F**L**LNNTRPP**T**GNWFGCTWMNSTGF
HCV6	D-RPYCWHY**A**PRPC**DV**VPA**RT**VCGPVYCFTPSPVVVGTTDR**R**G**N**PTY**T**WG**E**N**E**TDVF**L**L**ESL**RPP**T**G**G**WFGCTWMNSTGF
	561 570 580 590 600 610 620 630 640
H77 (NC_004102)	TKVCGAPPCVIGGVGNNTLLCPTDCFRKHPEATYSRCGSGPWITPRCMVDYPYRLWHYPCTINYTIFKVRMYVGGVEHRL
HCV1	TKVCGAPPCVIGGVGNNTL**H**CPTDCFRKHPEATYSRCGSGPWITPRC**L**VDYPYRLWHYPCT**V**NYTIFKVRMYVGGVEHRL
HCV2	TK**T**CGAPPC**R**I**RRDFTLD**LLCPTDCFRKHP**D**ATY**IK**CG**A**GPW**L**TPRC**L**VDYPYRLWHYPCT**V**N**F**TIFKVRMYVGGVEHRL
HCV3	**V**K**T**CGAPPC**N**I**Y**G**GPESD**L**F**CPTDCFRKHPEATYSRCG**A**GPW**L**TPRCMVDYPYRLWHYPCT**V**N**F**T**L**FKVRM**F**VGG**F**EHR**F**
HCV4	TK**T**CGAPPC**SVQTN-**N**GSWS**CPTDCFRKHPE**T**TY**TK**CGSGPW**L**TPRC**L**V**H**YPYRLWHYPCT**V**NYTIFKVRMYVGG**I**EHRL
HCV5	**V**K**T**CGAPPC**N**LG**PT**-NN**S**L**K**CPTDCFRKHP**D**ATY**T**RCGSGPW**L**TPRC**L**V**H**YPYRLWHYPCT**V**NYTIFKVRM**FI**GG**L**EHRL
HCV6	**V**K**T**CGAPPC**Q**I**VPG**-NN**E**LLCPTDCFRKHPEATY**A**RCGSGPW**L**TPRC**L**VDYPYRLWHYPCT**V**N**F**TI**H**KVRM**F**VGGVEHR**F**

Table S6. *Cont.*

	E1∣E2
	641 650 660 670 680 690 700 710 720
H77 (NC_004102)	EAACNWTRGERCDLEDRDRSELSPLLLSTTQWQVLPCSFTTLPALSTGLIHLHQNIVDVQYLYGVGSSIASWAIKWEYVV
HCV1	EAACNWTRGERCDLEDRDRSELSPLLLSTTQWQVLPCSFTTLPALSTGLIHLHQNIVDVQYLYGVGSSI**V**SWAIKWEYVV
HCV2	**S**AACN**F**TRG**D**RC**R**LEDRDR**GQQ**SPLL**H**STT**E**W**A**VLPCSF**SD**LPALSTGL**L**HLHQNIVDVQYLYG**LSPA**I**TRYIV**KWE**W**VV
HCV3	**T**AACNWTRGERCD**I**EDRDRSE**QH**PLL**H**STT**ELAI**LPCSFT**PM**PALSTGLIHLHQNIVDVQYLYGVGS**GMVG**WA**L**KWE**F**V**I**
HCV4	EAACNWTRGE**P**C**G**LE**H**RDR**T**ELSPLLLSTTQWQVLPCSFTTLPALSTGLIHLHQNIVDVQYLYGVGS**AVV**SWA**L**KWEYVV
HCV5	EAACNWTRGERCDLEDRDR**A**ELSPLL**HT**TTQW**AI**LPCSFT**PT**PALSTGLIHLHQNIVD**T**QYLYG**LS**SSI**V**SWA**V**KWEY**I**V
HCV6	**D**AACNWTRGERC**E**L**D**DRDR**IEM**SPLL**F**STTQ**LAI**LPCSFTT**M**PALSTGLIHLHQNIVDVQYLYGV**S**SS**VV**SWA**V**KWEYVV
	721 730 740 750 760 770 780 790 800
H77 (NC_004102)	LLFLLLADARVCSCLWMMLLISQAEAALENLVILNAASLAGTHGLVSFLVFFCFAWYLKGRWVPGAVYAFYGMWPLLLLL
HCV1	LLFLLLADARVCSCLWMMLLISQAEAALENLV**V**LNAASLAGTHGLVSFLVFFCFAWYLKGRWVPGA**A**YA**L**YGMWPLLLLL
HCV2	LLFLLLADARVC**A**CLWM**LIILG**QAEAALE**K**L**II**L**HS**AS**A**A**SAN**G**PLW**F**FI**FF**IA**AWYLKGR**V**VP**L**A**T**Y**SVL**G**L**W**SF**LLL**V**
HCV3	L**V**FLLLADARVC**VA**LW**LM**L**M**ISQAEAALENLV**T**LNA**VAA**AGTHG**IGWY**LV**A**FC**A**AW**HVR**G**KL**VP**LVT**Y**SLT**G**L**W**S**L**A**LL**V**
HCV4	L**A**FLLLADARVC**A**CLWMMLL**V**SQ**V**EAAL**A**NL**ITI**NAAS**A**AGTHG**FWYAIL**F**I**C**V**AWY**V**KGR**LPAA**A**T**YA**AC**GMWPLLLLL
HCV5	L**A**FLLLADAR**ICT**CLW**I**MLL**VC**QAEAALENV**IV**LNAA**AA**AGTHG**FFWG**L**LVI**CFAW**HF**KGR**L**VPGA**T**Y**LCL**G**I**WPLLLLL
HCV6	L**A**FL**V**LADAR**I**C**A**CLW**L**MLL**VG**QAEAALENL**IV**LNAAS**A**A**S**T**Q**G**WLWG**L**L**F**I**C**C**AWY**V**KGR**L**VP**LCT**YA**ALQL**WPLLLL**V**
	E2∣p7
	801 810 820 830 840 850 860 870 880
H77 (NC_004102)	LALPQRAYALDTEVAASCGGVVLVGLMALTLSPYYKRYISWCMWWLQYFLTRVEAQLHVWVPPLNVRGGRDAVILLMCVV
HCV1	LALPQRAYALDTEVAASCGGVVLVGLMALTLSPYYKRYISWC**L**WWLQYFLTR**A**EAQLHVWVPPLNVRGGRDAVILLMCVV
HCV2	LALPQ**Q**AYALD**AAEQGEL**G**L**V**L**LV**IISIF**TL**T**P**A**YK**ILL**S**RSV**WWL**S**Y**M**L**VLA**EAQ**IQQ**WVPPL**EA**RGGRD**GI**I**WAAVIL**
HCV3	L**L**LPQRAYA**WSG**E**DS**A**TL**G**AG**VL**ALFGFF**TLSP**W**YK**HW**I**GRL**MWW**N**QY**TIC**R**C**E**A**AL**Q**VWVPPL**A**VRG**S**RD**G**VILL**TSLL**
HCV4	LALP**E**RAYA**F**D**R**EVA**G**S**L**GG**G**V**V**V**L**L**TI**LTLSP**H**YKR**WLARGI**WWLQYF**IA**R**A**EA**L**LHV**Y**VP**S**L**E**VRG**P**RD**S**VI**I**L**TALF**
HCV5	L**L**LP**H**RA**L**ALD**SSDGG**S**V**G**CL**VL**II**L**TIF**TL**T**P**G**YK**KMVVLV**MWWLQYF**IA**RVEA**AI**HVWVPPL**Q**VRGGRDA**IIM**L**T**C**LF**
HCV6	LALP**R**RAYA**M**D**N**E**Q**AAS**L**G**AL**VL**LIITIF**TLSP**A**YK**KLLTSFI**WW**N**QYF**IA**R**A**EA**M**LHVWVP**S**L**R**VRGGRDAVILL**TCLL**
	p7∣NS2
	881 890 900 910 920 930 940 950 960
H77 (NC_004102)	HPTLVFDITKLLLAIFGPLWILQASLLKVPYFVRVQGLLRICALARKIAGGHYVQMAIIKLGALTGTYVYNHLTPLRDWA
HCV1	HPTLVFDITKLLLA**V**FGPLWILQASLLKVPYFVRVQGLLRICALARK**M**AGGHYVQMAIIKLGALTGTYVYNHLTPLRDWA
HCV2	HP**R**LVF**E**ITK**W**LLAI**L**GP**AYL**L**K**ASLL**R**VPYFVR**AHA**LLR**V**C**T**L**V**R**HL**AG**AR**Y**I**QM**LL**I**T**LG**RW**TGTY**I**Y**D**HL**S**PLRDWA
HCV3	**Y**P**S**L**I**FDITKLL**I**A**VL**GPL**YLI**QA**AITTT**PYFVR**AHV**L**VRL**C**M**L**V**R**SVM**GG**K**Y**F**QM**I**I**LSI**G**RWFN**TY**L**Y**D**HL**A**PLRDWA
HCV4	**H**P**H**L**A**FDITK**Y**LLAI**L**GPL**Y**ILQASLL**R**VPYFVR**AHA**L**IK**IC**S**L**V**R**GVVY**G**K**Y**C**QMA**LL**KLGALTGTY**I**Y**D**HL**A**PLRDWA
HCV5	**H**P**A**L**G**F**E**ITK**I**LL**G**I**L**GPL**YL**LQ**H**SL**T**K**L**PYF**I**R**ARA**LLR**L**C**L**LA**KHLVY**G**K**YVQ**A**A**LLH**LG**R**LTGTY**I**Y**D**HL**A**PLRDWA
HCV6	**H**P**Q**L**G**F**EV**TK**I**LLA**LL**GPL**YL**LQ**Y**SLLKVPYFVR**AHI**LLR**A**C**M**L**V**R**RL**AGG**K**YVQ**ACLLR**LGA**W**TGTY**I**Y**D**HL**A**PLRDWA

Table S6. *Cont.*

	p7∣NS2
	961 970 980 990 1000 1010 1020 1030 1040
H77 (NC_004102)	HNGLRDLAVAVEPVVFSRMETKLITWGADTAACGDIINGLPVSARRGQEILLGPADGMVSKGWRLLAPITAYAQQTRGLL
HCV1	HNGLRDLAVAVEPVVFSRMETKLITWGADTAACGDIINGLPVSARRGQEILLGPADGMVSKGWRLLAPITAYAQQTRGLL
HCV2	HNGLRDLAVAVEPVVFSRMETKLITWGADTAACGDIINGLPVSARRGQEILLGPADGMVSKGWRLLAPITAYAQQTRGLL
HCV3	HNGLRDLAVAVEPVVFSRMETKLITWGADTAACGDIINGLPVSARRGQEILLGPADGMVSKGWRLLAPITAYAQQTRGLL
HCV4	HNGLRDLAVAVEPVVFSRMETKLITWGADTAACGDIINGLPVSARRGQEILLGPADGMVSKGWRLLAPITAYAQQTRGLL
HCV5	HNGLRDLAVAVEPVVFSRMETKLITWGADTAACGDIINGLPVSARRGQEILLGPADGMVSKGWRLLAPITAYAQQTRGLL
HCV6	HNGLRDLAVAVEPVVFSRMETKLITWGADTAACGDIINGLPVSARRGQEILLGPADGMVSKGWRLLAPITAYAQQTRGLL
	NS2∣NS3
	1041 1050 1060 1070 1080 1090 1100 1110 1120
H77 (NC_004102)	GCIITSLTGRDKNQVEGEVQIVSTATQTFLATCINGVCWTVYHGAGTRTIASPKGPVIQMYTNVDQDLVGWPAPQGSRSL
HCV1	GCIITSLTGRDKNQVEGEVQIVSTA**A**QTFLATCINGVCWTVYHGAGTRTIASPKGPVIQMYTNVDQDLVGWPAPQG**A**RSL
HCV2	GCIITSLTGRDKNQVEGEVQIVSTATQ**S**FLATCINGVCWTVYHGAGTRTIASPKGPVIQMYTN**AEG**DLVGWP**S**P**P**G**TK**SL
HCV3	GCIITSLTGRDKNQVEGEVQIVSTATQTFLATCINGVCWTVYHGAGTRTIASPKGPVIQMYTNVDQDLVGWPAP**P**G**AK**SL
HCV4	GCIITSLTGRDKNQVEGEVQIVSTATQ**S**FLATCINGVCWTVYHGAGTRTIASPKGPVIQMYTNVDQDLVGWPAP**P**G**VK**SL
HCV5	GCIITSLTGRDKNQVEGEVQIVSTATQTFLATCINGVCWTVYHGAGTRTIASPKGPVIQMYTNVD**K**DLVGWP**S**P**P**G**T**RSL
HCV6	GCIITSLTGRDKNQVEGEVQIVSTATQ**S**FLATCINGVCWTVYHGAGTRTIASPKGPVIQMYTNVDQDLVGWPAP**P**G**A**RSL
	1121 1130 1140 1150 1160 1170 1180 1190 1200
H77 (NC_004102)	TPCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPISYLKGSSGGPLLCPAGHAVGLFRAAVCTRGVAKAVDFIPVEN
HCV1	TPCTCGSSDLYLVTRHADVIPVRRRGDSRGSLLSPRPISYLKGSSGGPLLCPAGHAVG**I**FRAAVCTRGVAKAVDFIPVE**S**
HCV2	**D**PCTCG**AV**DLYLVTR**N**ADVIPVRR**KD**D**R**RG**A**LLSPRP**L**S**T**LKGSSGGP**V**LCP**R**GHAVGLFRAAVC**S**RGVAK**SI**DFIPVE**S**
HCV3	**E**PCTCGS**A**DLYLVTR**D**ADVIP**A**RRRGDS**TA**SLLSPRP**LAC**LKGSSGGP**VM**CP**S**GH**VA**G**I**FRAAVCTRGVAKA**LQ**FIPVE**T**
HCV4	**A**PCTCG**A**SDL**F**LVTRHADV**V**PVRRRGD**T**RG**A**LLSPRPIS**T**LKGSSGGPLLCP**L**GHAVG**I**FRAAVCTRGVAKAVDF**V**PVE**S**
HCV5	TPCTCGS**A**DLYLVTRHADVIP**A**RRRGD**T**R**A**SLLSPRPISYLKGSSGGP**VM**CP**S**GH**V**VG**V**FRAAVCTRGVAKA**LE**FIPVEN
HCV6	TPCTCGSSDLYLVTR**N**ADVIP**A**RRRGD**N**R**AA**LLSPRPIS**T**LKGSSGGP**I**LCP**S**GH**V**VGLFRAAVCTRGVAK**SL**DF**V**PVEN
	1201 1210 1220 1230 1240 1250 1260 1270 1280
H77 (NC_004102)	LETTMRSPVFTDNSSPPAVPQSFQVAHLHAPTGSGKSTKVPAAYAAQGYKVLVLNPSVAATLGFGAYMSKAHGVDPNIRT
HCV1	LETTMRSPVFTDNSSPPAVPQSFQVAHLHAPTGSGKSTKVPAAYAAQGYKVLVLNPSVAATLGFGAYMSKAHGVDPNIRT
HCV2	L**DIAT**RSP**S**F**S**DNS**T**PPAVPQ**TY**QV**GY**LHAPTGSGKSTKVPAAYA**S**QGYKVLVLNPSVAATLGFGAYMSKAHG**IN**PNIRT
HCV3	L**S**T**QA**RSP**S**F**S**DNS**T**PPAVPQS**Y**QV**GY**LHAPTGSGKSTKVPAAY**V**AQGY**N**VLVLNPSVAATLGFG**SF**MS**R**A**Y**G**I**DPNIRT
HCV4	LETTMRSPVFTDNS**T**PPAVPQ**TY**QVAHLHAPTGSGKSTKVPAAYAAQGYKVLVLNPSVAATLGFGAYMSKAHG**I**DPNIR**S**
HCV5	LETTMRSPVFTDNS**T**PPAVP**HE**FQV**G**HLHAPTGSGKSTKVPAAYAAQGYKVLVLNPSVAATLGFGAYMSRAYGVDPNIRT
HCV6	**M**ETTMRSP**S**FTDNS**T**PPAVPQ**TY**QV**GY**LHAPTGSGKSTKVPAAYA**S**QGYKVLVLNPSVAATLGFG**S**YMS**Q**AHG**I**DPNIRT

Table S6. *Cont.*

	NS2|NS3
	1281 1290 1300 1310 1320 1330 1340 1350 1360
H77 (NC_004102)	GVRTITTGSPITYSTYGKFLADGGCSGGAYDIIICDECHSTDATSILGIGTVLDQAETAGARLVVLATATPPGSVTVSHP
HCV1	GVRTITTGSPITYSTYGKFLADGGCSGGAYDIIICDECHSTDATSILGIGTVLDQAETAGARLVVLATATPPGSVTV**P**HP
HCV2	GVRT**V**TTG**D**PITYSTYGKFLADGGCS**A**GAYDIIICDECHS**V**DAT**T**ILGIGTVLDQAETAG**V**RLVVLATATPPG**T**VT**TP**H**S**
HCV3	G**N**RT**V**TTG**AKL**TYSTYGKFLADGGCSGGAYD**V**IICDECH**AQ**DATSILGIGTVLDQAETAG**V**RL**T**VLATATPPGS**I**TV**P**H**S**
HCV4	GVRTITTG**A**PITYSTYGKFLADGGC**G**GGAYDIIICDECHSTD**S**T**T**ILGIGTVLDQAETAGARLVVLATATPPGSVT**TP**H**A**
HCV5	GVRTVTTGAAITYSTYGKFLADGGCSGGAYD**V**IICDECHS**Q**DAT**T**ILGIGTVLDQAETAGARLVVLATATPPGSVT**TP**HP
HCV6	GVRTITTG**GA**ITYSTYGKFLADGGCSGGAYDIIICDECHSTD**P**T**TV**LGIGTVLDQAETAG**V**RL**T**VLATATPPGSVTV**P**HP
	1361 1370 1380 1390 1400 1410 1420 1430 1440
H77 (NC_004102)	NIEEVALSTTGEIPFYGKAIPLEVIKGGRHLIFCHSKKKCDELAAKLVALGINAVAYYRGLDVSVIPTSGDVVVVSTDAL
HCV1	NIEEVALSTTGEIPFYGKAIPLEVIKGGRHLIFCHSKKKCDELAAKLVALGINAVAYYRGLDVSVIPTSGDVVVV**A**TDAL
HCV2	NIEEVAL**GHE**GEIPFYGKAIPL**AY**IKGGRHLIFCHSKKKCDELAA**A**L**RGM**G**V**NAVAYYRGLDVSVIPT**Q**GDVVVV**A**TDAL
HCV3	NIEEVAL**GSE**GEIPFYGKAIP**IALL**KGGRHLIFCHSKKKCDELA**S**KL**RGM**G**L**NAVAYYRGLDVSVIPT**T**GDVVV**CA**TDAL
HCV4	NIEEVAL**P**TTGEIPFYG**R**AIPL**AL**IKGGRHLIFCHSKKKCDELA**KQ**L**SS**LG**L**NAVAYYRGLDVSVIPTSGDVVV**CA**TDAL
HCV5	NIEEVAL**PSE**GEIPFYG**R**AIPL**AL**IKGGRHLIFCHSKKKCDELA**KQ**L**TSQ**G**V**NAVAYYRGLDV**A**VIP**AT**GDVVV**C**STDAL
HCV6	NI**T**E**T**AL**P**TTGEIPFYGKAIPLE**Y**IKGGRHLIFCHSKKKCDELA**KQ**L**TS**LG**L**NAVA**F**YRG**V**DVSVIPTSGDVVV**CA**TDAL
	1441 1450 1460 1470 1480 1490 1500 1510 1520
H77 (NC_004102)	MTGFTGDFDSVIDCNTCVTQTVDFSLDPTFTIETTTLPQDAVSRTQRRGRTGRGKPGIYRFVAPGERPSGMFDSSVLCEC
HCV1	MTGFTGDFDSVIDCNTCVTQTVDFSLDPTFTIETTTLPQDAVSRTQRRGRTGRGKPGIYRFVAPGERPSGMFDSSVLCEC
HCV2	MTG**Y**TGDFDSVIDCN**VA**VTQ**I**VDFSLDPTFTI**T**T**Q**T**V**PQDAVSR**S**QRRGRTGRG**RL**GIYR**Y**V**SS**GERPSGMFDS**V**VLCEC
HCV3	MTGFTGDFDSVIDCN**VA**V**E**Q**Y**VDFSLDPTF**S**IET**R**T**A**PQDAVSR**S**QRRGRTGRG**RL**G**T**YR**Y**V**T**PGERPSGMFDS**V**VLCEC
HCV4	MTGFTGDFDSVIDCNT**S**V**I**QTVDFSLDPTF**S**IETTT**V**PQDAVSR**S**QRRGRTGRG**RL**GIYR**Y**V**T**PGERPSGMFD**T**SVLCEC
HCV5	MTGFTGDFDSVIDCN**SA**VTQTVDFSLDPTFTIETTT**V**PQDAVSR**S**QRRGRTGRG**RH**GIYR**Y**V**SS**GERPSG**I**FDS**V**VLCEC
HCV6	MTGFTGDFDSVIDCN**VA**VTQ**V**VDFSLDPTF**S**IETTT**V**PQDAVSR**S**QRRGRTGRGKPG**V**YR**Y**V**SQ**GERPSGMFD**TV**VLCE**A**
	1521 1530 1540 1550 1560 1570 1580 1590 1600
H77 (NC_004102)	YDAGCAWYELTPAETTVRLRAYMNTPGLPVCQDHLEFWEGVFTGLTHIDAHFLSQTKQSGENFPYLVAYQATVCARAQAP
HCV1	YDAGCAWYELTPAETTVRLRAYMNTPGLPVCQDHLEFWEGVFTGLTHIDAHFLSQTKQSGENFPYLVAYQATVCARAQAP
HCV2	YDAG**A**AWYELTPAETTVRLRAY**F**NTPGLPVCQDHLEFWE**A**VFTGLTHIDAHFLSQTKQ**G**GENF**A**YL**T**AYQATVCARA**K**AP
HCV3	YDAGC**S**WY**D**L**Q**PAETTVRLRAY**LS**TPGLPVCQDHL**D**FWE**S**VFTGLTHIDAHFLSQTKQ**Q**G**L**NF**S**YL**T**AYQATVCARAQAP
HCV4	YDAGCAWYELTPAETT**T**RLRAY**F**NTPGLPVCQDHLEFWE**S**VFTGLTHIDAHFLSQTKQ**A**G**D**N**Y**PYLVAYQATVCARA**L**AP
HCV5	YDAGCAWY**D**LTPAETTVRLRAY**L**NTPGLPVCQDHLEFWEGVFTGLT**N**IDAH**M**LSQTKQ**G**GENFPYLVAYQATVC**V**RA**K**AP
HCV6	YD**T**GCAWYELTP**S**ETTVRLRAY**L**NTPGLPVCQDHLEFWEGVFTGLTHIDAHFLSQTKQ**A**GENF**A**YLVAYQATVCARA**K**AP

Table S6. *Cont.*

	NS2|NS3
	1601 1610 1620 1630 1640 1650 1660 1670 1680
H77 (NC_004102)	PPSWDQMWKCLIRLKPTLHGPTPLLYRLGAVQNEVTLTHPITKYIMTCMSADLEVVTSTWVLVGGVLAALAAYCLSTGCV
HCV1	PPSWDQMWKCLIRLKPTLHGPTPLLYRLGAVQNEVTLTHPITKYIMTCMSADLEVVTSTWVLVGGVLAALAAYCLSTGCV
HCV2	PPSWD**V**MWKCL**T**RLKPTL**T**GPTPLLYRLGAV**T**NEVTLTHP**V**TKYI**A**TCM**Q**ADLE**IM**TSTWVL**A**GGVLAA**V**AAYCL**A**TGCV
HCV3	PPSWD**E**MWKCL**V**RLKPTLHGPTPLLYRLG**P**VQNE**IC**LTHPITKYIM**A**CMSADLEV**T**TSTWVL**L**GGVLAALAAYCLS**V**GCV
HCV4	PPSWD**T**MWKCLIRLKPTLHGPTPLLYRLGAVQNEVTLTHPITKYIM**A**CMSADLEVVTSTWVLVGG**I**LAALAAYCLS**V**G**S**V
HCV5	PPSWD**T**MWKC**ML**RLKPTL**T**GPTPLLYRLGAVQNE**I**TLTHPITKYIM**A**CMSADLEV**I**TSTWVLVGGV**V**AALAAYCL**TV**G**S**V
HCV6	PPSWD**T**MWKCLIRLKPTL**T**GPTPLLYRLGAVQNE**IIT**THPITKYIMTCMSADLEV**I**TSTWVLVGGVLAALAAYCLS**V**GCV
	NS3|NS4A
	1681 1690 1700 1710 1720 1730 1740 1750 1760
H77 (NC_004102)	VGRIVLSGKPAIIPDREVLYQEFDEMEECSQHLPYIEQGMMLAEQFKQKALGLLQTASRQAEVITPAVQTNWQKLEVFWA
HCV1	VGRIVLSGKPAIIPDREVLY**R**EFDEMEECSQHLPYIEQGMMLAEQFKQKALGLLQTASRQAEVI**A**PAVQTNWQKLE**A**FWA
HCV2	**I**GR**LH**L**NDRVVVA**PD**K**EVLY**EA**FDEMEEC**ASKAAL**IEQ**AQRI**AE**ML**K**S**K**IQ**GLLQ**Q**A**TK**QA**QD**I**Q**PA**I**Q**SS**W**P**KLE**Q**FWA
HCV3	VG**H**I**E**L**G**GKPA**LV**PD**K**EVLYQ**QY**DEMEECSQ**AA**PYIEQ**AQVI**A**H**QFK**E**K**V**LGLLQ**R**A**TQ**Q**QA**VI**E**P**I**V**A**TNWQKLE**A**FW**H**
HCV4	VGR**V**VLSG**Q**PA**V**IPDREVLYQ**Q**FDEMEECS**K**HLP**LV**E**H**G**LQ**LAEQFKQKALG**V**L**SV**A**GK**QA**QEAA**P**V**VQ**S**N**FA**KLE**Q**FWA
HCV5	VGRI**I**LSG**R**PAIIPDREVLYQ**Q**FDEMEECS**AS**LPY**MD**E**ARAI**A**G**QFK**E**K**V**LGL**IG**TA**GQK**AE**TLK**PA**ATSM**W**SRA**E**Q**FWA
HCV6	**C**GRI**TTT**GKPA**VV**PDREVLYQ**Q**FDEMEECS**R**H**I**PY**LAE**G**QQI**AEQFKQK**V**LGL**I**QT**SAK**QAE**ELK**PA**VHSA**W**P**KLE**Q**FW**Q**
	NS4A|NS4B
	1761 1770 1780 1790 1800 1810 1820 1830 1840
H77 (NC_004102)	KHMWNFISGIQYLAGLSTLPGNPAIASLMAFTAAVTSPLTTGQTLLFNILGGWVAAQLAAPGAATAFVGAGLAGAAIGSV
HCV1	KHMWNFISGIQYLAGLSTLPGNPAIASLMAFTAAVTSPLTT**S**QTLLFNILGGWVAAQLAAPGAATAFVGAGLAGAAIGSV
HCV2	KHMWNFISGIQYLAGLSTLPGNPA**V**AS**M**MAF**S**AA**L**TSPL**S**T**ST**T**I**LLNI**M**GGW**L**A**S**Q**I**A**P**P**AG**AT**G**FV**VS**GL**V**GAA**V**GS**I**
HCV3	KHMWNF**V**SGIQYLAGLSTLPGNPA**V**ASLMAFTA**S**VTSPLTT**N**QT**MF**FNILGGWVA**TH**LA**G**P**QSSS**AFV**VS**GLAGAAIG**GI**
HCV4	KHMWNFISGIQYLAGLSTLPGNPAIASLM**S**FTAAVTSPLTT**Q**QTLLFNILGGWVA**S**Q**I**A**T**P**TAS**TAFV**VS**GLAGAA**V**GSV
HCV5	KHMWNF**V**SGIQYLAGLSTLPGNPA**V**A**T**LM**S**FTAAVTSPLTT**Q**QTLLFNILGGWVA**S**Q**I**A**P**P**T**AATAFV**VS**G**M**AGAA**V**GS**I**
HCV6	KHMWNF**V**SGIQYLAGLSTLPGNPA**V**ASLM**S**F**S**A**SL**TSPL**S**T**S**QTLL**L**NILGGWVA**S**QLA**P**P**P**A**S**TAFV**VS**GLAGAA**V**GS**I**
	1841 1850 1860 1870 1880 1890 1900 1910 1920
H77 (NC_004102)	GLGKVLVDILAGYGAGVAGALVAFKIMSGEVPSTEDLVNLLPAILSPGALVVGVVCAAILRRHVGPGEGAVQWMNRLIAF
HCV1	GLGKVLVDILAGYGAGVAGALVAFKIMSGEVPSTEDLVNLLPAILSPGALVVGVVCAAILRRHVGPGEGAVQWMNRLIAF
HCV2	GLGK**I**LVD**V**LAGYGAG**IS**GALVAFKIMSGE**K**PS**V**ED**V**VNLLPAILSPGALVVGV**I**CAAILRRHVG**Q**GEGAVQWMNRLIAF
HCV3	GLG**R**VL**L**DILAGYGAGV**S**GALVAFKIM**G**GE**L**P**TA**ED**M**VNLLPAILSPGALVVGV**I**CAAILRRHVGPGEGAVQWMNRLIAF
HCV4	GLGK**I**LVDILAGYGAGVAGA**V**V**T**FKIMSGEVPSTEDLVNLLPAILSPGALVVGVVCAAILRRHVGPGEGAVQWMNRLIAF
HCV5	GLG**R**VL**I**DILAGYGAGVAGALVAFKIM**C**GE**K**PS**A**EDLVNLLP**S**IL**C**PGALVVGV**I**CAA**V**LRRH**I**GPGEGAVQWMNRLIAF
HCV6	GLGKVLVDILAGYGAGV**S**GALVAFKIMSGE**T**PSTED**M**VNLLPA**L**LSPGALVVGVVCAAILRRHVGP**A**EGA**N**QWMNRLIAF

Table S6. *Cont.*

	NS4A∣NS4B
	1921 1930 1940 1950 1960 1970 1980 1990 2000
H77 (NC_004102)	ASRGNHVSPTHYVPESDAAARVTAILSSLTVTQLLRRLHQWISSECTTPCSGSWLRDIWDWICEVLSDFKTWLKAKLMPQ
HCV1	ASRGNHVSPTHYVPESDAAARVTAILSSLTVTQLLRRLHQWISSECTTPCSGSWLRDIWDWICEVLSDFKTWLKAKLMPQ
HCV2	ASRGNHV**A**PTHYV**A**ESDA**SQ**RVT**QL**LSSLT**I**T**S**LLRRLH**A**WI**TED**C**PV**PCSGSWLRDIWDW**V**C**SI**L**T**DFK**N**WL**SS**KL**L**P**K**
HCV3	ASRGNHVSPTHYVPESDAAARVTA**L**LSSLTVT**S**LLRRLHQWI**NEDYPS**PCSG**D**WLR**T**IWDW**V**C**T**VLSDFKTWL**S**AK**I**MP**A**
HCV4	ASRGNHVSPTHYVPESDAAARVTAILSSLTVT**S**LLRRLH**K**WI**NEDCS**TPC**DS**SWLR**WE**WDW**V**C**T**VLSDFKTWLKAKL**L**P**R**
HCV5	ASRGNHVSPTHYVPE**T**DA**S**A**K**VT**QL**LSSLTVT**S**LL**K**RLH**T**WI**GEDYS**TPC**DGT**WLR**A**IWDW**V**C**TA**L**T**DFK**A**WL**Q**AKL**L**PQ
HCV6	ASRGNHVSPTHYVPETDASRNVTQILSSLT**I**T**S**LLR**K**LHQWI**NEDWS**TPCS**T**SWLRDIWDW**V**C**T**VLSDFKTWLKAKL**V**P**S**
	NS4B∣NS5A
	2001 2010 2020 2030 2040 2050 2060 2070 2080
H77 (NC_004102)	LPGIPFVSCQRGYRGVWRGDGIMHTRCHCGAEITGHVKNGTMRIVGPRTCRNMWSGTFPINAYTTGPCTPLPAPNYKFAL
HCV1	LPGIPFVSCQRGYRGVWRGDGIMHTRCHCGAEITGHVKNGTMRIVGP**K**TCRNMWSGTFPINAYTTGPCTPLPAPNY**S**FAL
HCV2	**M**PG**L**PF**I**SCQ**K**GYAGVW**AGT**GIM**T**TRC**P**CGA**N**I**S**GHV**RM**GTM**KIT**GP**K**TC**L**N**L**W**Q**GTFPIN**C**YT**E**GPC**V**P**K**P**P**PNYK**T**A**I**
HCV3	LPG**L**PF**I**SCQ**K**GY**K**GVWRGDG**V**M**S**TRC**P**CGA**S**ITGHVKNG**S**MR**LA**GPRTC**A**NMW**H**GTFPIN**E**YTTGP**S**TP**C**P**S**PNY**TR**AL
HCV4	**M**PGIPF**L**SCQ**K**GY**K**G**E**WRGDG**V**MHT**T**C**P**CGAE**LA**GH**I**KNG**S**MRIVGP**K**TC**S**N**T**W**H**GTFPINAYTTGP**GV**P**I**PAPNYKFAL
HCV5	LPG**V**PF**L**SCQRGY**K**GVWRGDG**VNS**T**K**C**P**CGA**T**I**S**GHVKNGTMRIVGP**KL**C**S**N**T**W**H**GTFPINA**T**TTGP**SV**P**A**PAPNYKFAL
HCV6	LPGIPF**L**SCQRGYRGVWRGDG**VC**HT**T**C**T**CGA**V**I**A**GHVKNGTM**KIT**GPRTC**S**N**T**W**H**GTFPINA**T**TTGP**SV**P**I**PAPNY**TR**AL
	2081 2090 2100 2110 2120 2130 2140 2150 2160
H77 (NC_004102)	WRVSAEEYVEIRRVGDFHYVSGMTTDNLKCPCQIPSPEFFTELDGVRLHRFAPPCKPLLREEVSFRVGLHEYPVGSQLPC
HCV1	WRVSAEEYVEIRRVGDFHYV**T**GMTTDNLKCPCQ**V**PSPEFFTELDGVRLHRFAPPCKPLLREEVSFRVGLH**Q**YPVGSQLPC
HCV2	WRV**A**A**S**EYVE**VTQH**G**S**F**S**YV**T**G**L**T**S**DNLK**V**PCQ**V**P**A**PEFF**SWV**DGV**QI**HRFAP**TPG**P**FF**R**D**EV**T**F**T**VGL**NSFV**VGSQLPC
HCV3	WRV**A**A**NS**YVE**V**RRVGDFHY**IT**G**A**T**E**D**E**LKCPCQ**V**P**AA**EFFTE**V**DGVRLHR**Y**APPCKPLLR**D**E**IT**F**M**VGL**NS**Y**AI**GSQLPC
HCV4	WRVSAEEYVE**V**RRVGDFHYV**T**G**V**T**Q**DN**I**KCPCQ**V**P**A**PEFFTE**V**DGVRLHR**H**APPCKPLLR**D**EV**T**F**S**VGL**NTFV**VGSQLPC
HCV5	WRV**G**A**AD**Y**A**E**V**RRVGD**Y**HY**IT**G**V**T**Q**DNLKCPCQ**V**PSPEFFTELDGVR**I**HRFAPPC**N**PLLREEV**C**F**S**VGLH**S**Y**V**VGSQLPC
HCV6	WRVSAEEYVE**V**RRVGD**S**HYV**V**G**V**T**A**DNLKCPCQ**V**P**A**PEFFTE**V**DGVR**I**HR**Y**APPCKPLLR**D**EV**T**F**S**VGL**SS**Y**A**VGSQLPC
	2161 2170 2180 2190 2200 2210 2220 2230 2240
H77 (NC_004102)	EPEPDVAVLTSMLTDPSHITAEAAGRRLARGSPPSMASSSASQLSAPSLKATCTANHDSPDAELIEANLLWRQEMGGNIT
HCV1	EPEPDVAVLTSMLTDPSHITAEAAGRRLARGSPPS**L**ASSSASQLSAPSLKATCT**T**NHDSPDAELIEANLLWRQEMGGNIT
HCV2	**D**PEPD**TE**VL**A**SMLTDPSHITAEAA**A**RRLARGSPPS**Q**ASSSASQLSAPSLKATCT**THKMAY**D**CDMVD**ANL**F**----MGG**DV**T
HCV3	EPEPDV**S**VLTSML**R**DPSHITAE**T**A**A**RRLARGSPPS**E**ASSSASQLSAPSLKATC**QTHRPH**PDAEL**VD**ANLLW**--**EMG**S**NIT
HCV4	EPEPDVAVLTSMLTDPSHITAEAA**R**RRLARGSPPS**L**ASSSASQLSAPSLKATCTA**H**HDSP**G**A**D**LIEANLLW**----**G**A**N**A**T
HCV5	EPEPDV**T**VLTSML**S**DP**A**HITAE**T**A**K**RRL**D**RGSPPS**L**ASSSASQLSAPSLKATCT**TH**H**--**PDAELIEANLLWR-CMGGNIT
HCV6	EPEPDV**T**V**V**TSMLTDPSHITAE**T**A**A**RRLARGSPPS**L**ASSSASQLSAPSLKATCT**TD**H**--**PDAELIEANLLWR-EMGGNIT

Table S6. *Cont.*

	NS4B|NS5A
	2241 2250 2260 2270 2280 2290 2300 2310 2320
H77 (NC_004102)	RVESENKVVILDSFDPLVAEEDEREVSVPAEILRKSRRFARALPVWARPDYNPPLVETWKKPDYEPPVVHGCPLPPPRSP
HCV1	RVESENKVVILDSFDPLVAEEDERE**I**SVPAEILRKSRRF**PP**ALP**I**WARPDYNPPL**L**ETWKKPDYEPPVVHGCPLPPP**K**SP
HCV2	R**I**ES**DS**KV**IV**LDS**L**D**SMTEV**ED**D**RE**P**SVP**S**E**Y**L**IPR**R**K**F**PP**ALP**P**WARPDYNPP**VI**ETWK**R**PDYEPP**T**V**L**GC**A**L-P**TPQA**
HCV3	RVESE**T**KVVILDSF**E**PL**R**AE**T**D**DA**E**L**SV**A**AE**CFK**K**PPKYPP**ALP**I**WARPDYNPPL**LDR**WK**A**PDY**V**PP**T**VHGC**A**L-P**RGA**P
HCV4	RVESE**D**KVV**V**LDSF**E**PLVAE**P**D**D**REVSV**A**AEILR**PSKK**F**PP**ALP**I**WARPDYNPPLVETWK**Q**PDY**D**PPVVHGC**A**L-P**SKP**P
HCV5	RVE**A**ENKVVILDSF**E**PL-**KA**ED**D**RE**I**SV**S**A**DCF**R**RGPA**F**PP**ALPVWARP**G**Y**D**PPL**L**ETWK**R**PDY**D**PP**Q**V**S**GCPL-P**AGL**P
HCV6	RVESENKVV**V**LDSFDPL**TPEY**D**DEISVSAECHI**R**PRPK**F**PP**ALP**I**WARPDYNPPL**L**ETWK**A**PDYEPPVV**S**GC**A**L-PP**KPT**
	2321 2330 2340 2350 2360 2370 2380 2390 2400
H77 (NC_004102)	PVPPPRKKR-VVLTESTLSTALAELATKSFG-SSTSGITGDNTTTSSEPAPSGCPPDSDVESYSSMPPLEGEPGDPDLSD
HCV1	PVPPPRKKR-VVLTEST**V**STALAELATKSFG-SSTSGITGDNTTTSSEPA**S**SGCPPDSD**A**ESYSSMPPLEGEPGDPDLSD
HCV2	PVPPPR**RR**R-**K**VLT**QDNVEGV**L**R**E**M**A**D**K**V**F**S-GDSGHS**TG**AD**T**GGDTGQD**P**PDE**-**AA**S**ETG**S**L**SSMPPLEGEPGDPDL**EK**
HCV3	PVPPPR**R**KR-**IQ**L**DG**S**NV**S**A**ALA**A**LA**E**KSF**PSEEN**S**SSS**G**VD**T**QS**S**TTSKVPPS**-**GE**SD**S**ES**C**SSMPPLEGEPGDPDL**C**D
HCV4	PVPPPR**R**KR-VVL**S**ES**NV**S**D**ALA**D**LA**A**KSFG**QPESDSGA**G**LT**T**P**T**ETSDPDPII-DK**SD**DG**SYSSMPPLEGEPGDPDLSD
HCV5	PVPPPR**R**KR**KME**L**SD**ST**V**S**QV**LA**D**LA**HAR**F**KAP**SIEG**QDSALG**T**G**S**QPDSGPEE**-**D**DSD**AA**SYSSMPPLEGEPGDPDLS**-**
HCV6	P**I**PPPR**R**KR**LHLDESTVSHALAQLAEKVFPESDP**T**PSSDSGLSI**TS**GS**P**PAPTT**-**AA**SD**A**ESYSSMPPLEGEPGDPDLS**-**
	2401 2410 2420 2430 2440 2450 2460 2470 2480
H77 (NC_004102)	GSWSTVSSGADTEDVVCSMSYSWTGALVTPCAAEEQKLPINALSNSLLRHHNLVYSTTSRSACQRQKKVTFDRLQVLDSH
HCV1	GSWSTVSSA**A**DTEDVVCSMSY**T**WTGAL**I**TPCAAEEQKLPINALSNSLLRHHNLVYSTTSRSACQRQKKVTFDRLQVLDSH
HCV2	**S**SWSTVS**DQE--DS**V**I**CSMSYSWTGAL**I**TPC**GP**EE**E**KLPIN**P**LSNSL**M**R**F**HN**K**VYSTTSRSA**SL**R**A**KKVTFDR**V**QVLD**A**H
HCV3	**-**SWSTVSS**EE--QS**VVCSMSYSWTGAL**I**TPC**S**AEE**E**KLPI**SP**LSNSLLRHHNLVYST**S**SRSA**S**QRQKKVTFDRLQVLD**D**H
HCV4	**-**SWSTVSS**ED--**--VVCSMSYSWTGALVTPCAAEE**S**KLPIN**P**LSNSLLRHHN**M**VY**A**TTSRSA**TT**RQKKVTFDR**M**QV**V**D**N**H
HCV5	GSWSTVS**E**D**S--**--VVCSMSYSWTGAL**I**TPC**S**AEE**E**KLPIN**P**LSN**T**LLRHHNLVYST**S**SRSA**G**QRQKKVTFDRLQVLD**D**H
HCV6	GSWSTVS**E**D**D--**--VVCSMSYSWTGAL**I**TPCAAEE**E**KLPIN**P**LSNSLLRHHNLVYSTTSRSA**SL**RQKKVTFDR**V**QVLD**Q**H
	NS5A|NS5B
	2481 2490 2500 2510 2520 2530 2540 2550 2560
H77 (NC_004102)	YQDVLKEVKAAASKVKANLLSVEEACSLTPPHSAKSKFGYGAKDVRCHARKAVAHINSVWKDLLEDSVTPIDTTIMAKNE
HCV1	YQDVLKEVKAAASKVKANLLSVEEACSLTPPHSA**R**SKFGYGAKDVRCHARKAV**N**HINSVWKDLLEDSVTPIDTTIMAKNE
HCV2	Y**DS**VL**QD**VK**R**AASKV**S**A**R**LLSVEEAC**A**LTPPHSA**R**S**RY**G**F**GAK**E**VR**SLS**R**R**AV**N**HI**R**SVW**E**DLLED**QH**TPIDT-IMAKNE
HCV3	Y**KTA**LKEVK**ER**AS**R**VKA**RM**L**TI**EEAC**A**L**V**PPHSA**R**SKFGY**S**AKDVR**SLSS**KA**INQ**I**R**SVW**E**DLLED**TT**TPI**P**T-IMAKNE
HCV4	Y**HE**VLKE**I**KA**R**AS**G**VKA**R**LLSVEEAC**D**LTPPHSA**R**SKFGYGAKDVR**SHS**RKA**IN**HINSVW**E**DLLED**NT**TPI**P**T-IMAKNE
HCV5	Y**RE**V**VD**E**M**K**RL**ASKVKA**R**LL**PL**EEAC**G**LTPPHSA**R**SK**Y**GYGAK**E**VR**SLDK**KA**LK**HI**EG**VW**Q**DLL**D**DS**D**TP**LP**T-IMAKNE
HCV6	Y**Y**DVLKE**I**K**LR**AS**T**V**Q**A**K**LLS**I**EEAC**D**LTPPHSA**R**SKFGYGAKDVR**S**HA**S**KA**IN**HINSVW**E**DLLED**ND**TPI**P**T-IMAKNE

Table S6. *Cont.*

	NS5A∣NS5B
	2561 2570 2580 2590 2600 2610 2620 2630 2640
H77 (NC_004102)	VFCVQPEKGGRKPARLIVFPDLGVRVCEKMALYDVVSKLPLAVMGSSYGFQYSPGQRVEFLVQAWKSKKTPMGFSYDTRC
HCV1	VFCVQPEKGGRKPARLIVFPDLGVRVCEKMALYDVVSKLP**Q**AVMGSSYGFQYSPGQRVEFLVQAWKSKKTPMGFSYDTRC
HCV2	VFCV**D**P**T**KGG**K**KPARLIV**Y**PDLGVRVCEKMALYD**IAQ**KLP**K**AVMG**P**SYGFQYSP**AE**RV**D**FL**LK**AW**G**SKK**D**PMGFSYDTRC
HCV3	VFCV**D**P**V**KGGRKPARLIV**Y**PDLGVRVCEK**R**ALYDV**IQ**KL**SIET**MG**PA**YGFQYSP**Q**QRVE**R**L**LKM**W**T**SKKTP**L**GFSYDTRC
HCV4	VF**S**V**K**PEKGGRKPARLIV**Y**PDLGVRVCEK**R**ALYDVV**KQ**LP**K**AVMG**AA**YGFQYSP**A**QRVE**Y**L**LK**AW**R**SKK**V**PMGFSYDTRC
HCV5	VF**A**V**E**P**S**KGG**K**KPARLIV**Y**PDLGVRVCEK**R**ALYD**IAQ**KLP**T**A**L**MG**P**SYGFQYSP**A**QRVEFL**LK**AWKSKKTPM**A**FSYDTRC
HCV6	VFCV**D**P**S**KGGRKPARLIV**Y**PDLGVRVCEK**R**ALYD**ITR**KLP**Q**AVMG**DA**YGFQYSP**K**QRVE**Y**L**LKM**W**R**SKKTPMGFSYDTRC
	2641 2650 2660 2670 2680 2690 2700 2710 2720
H77 (NC_004102)	FDSTVTESDIRTEEAIYQCCDLDPQARVAIKSLTERLYVGGPLTNSRGENCGYRRCRASGVLTTSCGNTLTCYIKARAAC
HCV1	FDSTVTESDIRTEEAIYQCCDLDPQARVAIKSLTERLYVGGPLTNSRGENCGYRRCRASGVLTTSCGNTLTCYIKA**Q**AAC
HCV2	FDSTVTE**R**DIRTEE**S**IYQ**A**C**S**L**PEE**AR**T**AI**H**SLTERLYVGGP**M**TNS**K**G**QS**CGYRRCRASGV**F**TTS**M**GNT**M**TCYIKA**L**AAC
HCV3	FDSTVTE**Q**DIR**V**EE**E**IYQCC**N**L**E**P**E**AR**KV**I**S**SLTERLY**C**GGP**MF**NS**K**G**AQ**CGYRRCRASGVL**P**TS**F**GNT**I**TCYIKA**T**AA**A**
HCV4	FDSTVTE**R**DIR**V**EE**EV**YQCCDL**E**P**E**AR**KV**I**SA**LTERLYVGGP**MY**NS**K**G**DL**CGYRRCRASGV**Y**TTS**F**GNTLTCY**L**KA**T**AA**T**
HCV5	FDSTVTE**H**DI**M**TEE**S**IYQ**S**CDL**Q**P**E**AR**A**AI**R**SLT**Q**RLY**C**GGP**MY**NS**K**G**QQ**CGYRRCRASGV**F**TTS**M**GNT**M**TCYIKA**L**A**S**C
HCV6	FDSTVTE**R**DIRTE**ND**IYQ**S**CDLDP**E**AR**K**AI**S**SLTERLYVGGP**MY**NS**K**G**QS**CGYRRCRASGVL**P**TS**M**GNTLTCY**L**KA**Q**AAC
	2721 2730 2740 2750 2760 2770 2780 2790 2800
H77 (NC_004102)	RAAGLQDCTMLVCGDDLVVICESAGVQEDAASLRAFTEAMTRYSAPPGDPPQPEYDLELITSCSSNVSVAHDGAGKRVYY
HCV1	RAAGLQDCTMLVCGDDLVVICESAGVQEDAASLRAFTEAMTRYSAPPGDPPQPEYDLELITSCSSNVSVAHDGAGKRVYY
HCV2	**K**AAG**IV**D**P**TMLVCGDDLVVI**S**ES**QGNE**ED**ERN**LRAFTEAMTRYSAPPGD**L**P**R**PEYDLELITSCSSNVSVA**L**D**PR**G**R**R**R**YY
HCV3	RAAGL**RNPDF**LVCGDDLVV**VA**ES**D**GV**D**ED**R**A**A**LRAFTEAMTRYSAPPGD**A**PQP**T**YDLELITSCSSNVSVA**R**D**DK**GKR**Y**YY
HCV4	RAAGL**K**DCTMLVCGDDLVVI**A**ES**D**GV**E**EDA**RA**L**G**AFTEAMTRYSAPPGD**A**PQP**A**YDLELITSCSSNVSVAHD**AT**GKRVYY
HCV5	RAA**K**L**R**DCT**L**LVCGDDLV**A**ICES**QGTH**ED**E**ASLRAFTEAMTRYSAPPGDPP**V**P**A**YDLEL**V**TSCSSNVSVA**R**D**AS**G**N**RVYY
HCV6	RAAGL**K**D**FD**MLVCGDDLVVICESAGVQED**T**A**A**LRAFTEAMTRYSAPPGD**E**PQP**T**YDLELITSCSSNVSVAHDG**T**GKR**Y**YY
	2801 2810 2820 2830 2840 2850 2860 2870 2880
H77 (NC_004102)	LTRDPTTPLARAAWETARHTPVNSWLGNIIMFAPTLWARMILMTHFFSVLIARDQLEQALNCEIYGACYSIEPLDLPPII
HCV1	LTRDPTTPLARAAWETARHTPVNSWLGNIIMFAPTLWARMILMTHFFSVLIARDQLEQAL**D**CEIYGACYSIEPLDLPPII
HCV2	LTRDPTTP**I**ARAAWET**V**RH**S**PVNSWLGNII**QY**APT**I**W**V**RM**VI**MTHFFS**I**L**L**A**Q**D**T**L**N**Q**N**LN**F**E**M**YGA**V**YS**VN**PLDLP**A**II
HCV3	LTRD**A**TTPLARAAWETARHTPVNSWLGNIIM**Y**APT**I**W**V**RM**VM**MTHFFS**I**L**QSQEI**L**DRP**L**DF**E**M**YGA**T**YS**VT**PLDLP**A**II
HCV4	LTRDP**E**TPLARAAWETARHTPVNSWLGNII**LY**APT**I**W**V**RM**V**LMTHFFS**I**L**QSQEA**LE**K**AL**DFDM**YG**VT**YSI**T**PLDLP**A**II
HCV5	LTRDP**QV**PLARAAWETA**K**H**S**PVNSWLGNIIM**Y**APTLWAR**IV**LMTHFFSVL**QSQE**QLE**K**AL**AF**E**M**YG**SV**YS**VT**PLDLP**A**II
HCV6	LTRDPTTPLARAAWETARHTPVNSWLGNIIM**Y**APT**I**W**V**RM**V**LMTHFFS**I**L**Q**A**QE**QL**HK**AL**DFD**IYG**VT**YS**VT**PLDLP**A**II

Table S6. *Cont.*

	NS5A | NS5B
	2881 2890 2900 2910 2920 2930 2940 2950 2960
H77 (NC_004102)	QRLHGLSAFSLHSYSPGEINRVAACLRKLGVPPLRAWRHRARSVRARLLSRGGRAAICGKYLFNWAVRTKLKLTPIAAAG
HCV1	QRLHGLSAFSLHSYSPGEINRVAACLRKLGVPPLRAWRHRARSVRA**K**LLSRGGRAAICGKYLFNWAVRTKLKLTPIAAA**S**
HCV2	**E**RLHGL**D**AFSLH**T**YSP**H**E**LS**RVAA**T**LRKLG**A**PPLRAW**KS**RAR**A**VRA**S**L**IAQ-----------------------------**
HCV3	**E**RLHGLSAF**T**LHSYSP**V**E**L**NRVA**GT**LRKLG**C**PPLRAWRHRAR**A**VRA**K**L**IAQ**GG**K**A**K**ICG**L**YLFNWAVRTK**T**KLTP**LP**AAG
HCV4	QRLHGLSAF**T**LH**G**YSP**H**E**L**NRVA**GS**LRKLGVPPLRAWRHRAR**A**VRA**K**L**IAQ**GGRA**R**ICG**I**YLFNWAV**K**TKLKLTP**LP**AA**A**
HCV5	QRLHGLSAFSLHSYSP**S**EINRVA**S**CLRKLGVPPLRAWRHRAR**A**VRA**K**L-**AQ**GG-AAICG**I**YLFNWAV**K**TK**R**KLTP**L**A**D**A**D**
HCV6	QRLHG**MA**AFSLH**G**YSPGE**L**NRV**G**ACLRKLG**A**PPLRAWRHRAR**A**VRA**K**L**IAQ**GG**K**AAICGKYLFNWAV**K**TKLKLTP**LRG**A**S**
	2961 2970 2980 2990 3000
H77 (NC_004102)	RLDLSGWFTAGYSGGDIYHSVSHARPRWFWFCLLLLAVGV
HCV1	**Q**LDLSGWFTAGYSGGDIYHSVS**R**ARPRWFWFCLLLLAVGV
HCV2	**--**
HCV3	**Q**LDLS**S**WFT**V**G**VG**G**N**DIYHSVS**R**AR**T**R**HLLL**CLLLL**T**VGV
HCV4	**K**LDLS**S**WFT**V**G**AG**GGDIYHSVS**R**ARPR**YLLL**CLLLL**S**VGV
HCV5	RLDLS**S**WFT**V**G**AG**GGDIYHS**M**S**R**ARPR-**LLL**CLLLL**S**VGV
HCV6	**K**LDLSGWF**V**AGYSGGDIYHSVS**R**ARPR**LLLL**CLLLL**T**VGV

Table S7. Proportion of positions under positive selective pressure for all six HCV genotypes, according to the SLAC and FEL method. For all ten viral proteins, the proportion of positively selected positions (dN/dS ratio > 1, *p*-value < 0.05%) is listed, together with the median and IQR (Q1-Q3) over all six HCV genotypes. For each viral protein both the number of positively selected positions according to SLAC and FEL was listed per individual HCV genotype, with the upper percentage for SLAC and the lower for FEL.

%		HCV1	HCV2	HCV3	HCV4	HCV5	HCV6	Median (IQR = Q1 – Q3)
Core	SLAC	3.65	0.52	0	0	0	0	0.26 (0–0.52)
	FEL	2.60	0.52	0.52	0	0	1.56	0.52 (0.13–1.3)
E1	SLAC	6.77	0.52	0.52	0.52	0	0	0.52 (0.13–0.52)
	FEL	2.60	1.56	0.52	0	1.04	0.52	0.78 (0.52–1.43)
E2	SLAC	9.37	2.20	1.65	0.38	0	0.83	1.24 (0.83–2.07)
	FEL	6.89	2.20	2.75	1.10	1.93	1.93	2.07 (1.31–2.62)
p7	SLAC	4.76	0	0	0	0	0	0
	FEL	0	0	0	0	0	0	0
NS2	SLAC	3.23	0.46	0	0	0	0	0.23 (0–0.46)
	FEL	1.84	0.92	0	0	0	0	0 (0–0.69)
NS3	SLAC	0.32	0.32	0	0	0	0	0
	FEL	0.16	0.32	0.16	0	0	0	0.08 (0–0.16)
NS4A	SLAC	0	0	0	0	0	0	0
	FEL	0	0	0	0	0	0	0
NS4B	SLAC	0.77	0	0.38	0	0	0	0
	FEL	0.38	0	0.38	0	0	0	0 (0-0.29)
NS5A	SLAC	1.35	0	0.22	0	0	0	0
	FEL	0.67	0	0.22	0	0.22	0.22	0.11 (0–0.22)
NS5B	SLAC	3.37	0.51	0	0	0	0	0
	FEL	3.55	1.18	0.17	0.34	0	0	0.25 (0.04–0.97)
Full-genome	SLAC	3.12	0.53	0.30	0.13	0	0.17	0.23 (0.14–0.47)
	FEL	2.16	0.76	0.53	0.20	0.10	0.40	0.46 (0.13–1.3)

Table S8. Positions under positive selective pressure for all six individual HCV genotypes. For the six HCV genotypes, all positively selected positions (dN/dS ratio > 1, *p*-value < 0.05%), according to SLAC are listed, based on the total alignment and the H77 numbering.

HCV genotype 1	Core: 10, 16, 44, 71, 75, 158, 161 E1: 28, 40, 44, 65, 106, 108, 117, 139, 149, 153-154, 163, 192 E2: 2-3, 7, 10-12, 15, 18-19, 21-22, 25, 49, 53, 59-62, 78, 80, 91-93, 113-114, 135, 141, 170, 183, 187, 190, 193, 222, 234, 253 p7: 29, 38, 62 NS2: 22, 58, 108, 121, 140, 145-146 NS3: 545, 598 NS4A: / NS4B: 36, 145 NS5A: 204, 215, 235, 339, 392, 395 NS5B: 57, 90, 102, 109, 112, 122, 173, 182, 206, 267, 303, 329, 356, 431, 508, 542-543, 548, 563, 582
HCV genotype 2	Core: 71 E2: 1, 12, 17, 22, 25, 61, 78, 119, 165 NS2: 125 NS3: 288, 360 NS5B: 396, 564, 578
HCV genotype 3	E1: 44 E2: 81, 113, 158, 179, 197, 343 NS4B: 167 NS5A: 12
HCV genotype 4	E2: 1, 14, 33, 51
HCV genotype 5	/
HCV genotype 6	Core: 75 E2: 4, 17, 60 NS2: 118