A Simple Agarose Gel Staining Method to Reduce Contamination in the Laboratory and Environment
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Introduction

Gel staining in gel electrophoresis is a common procedure performed by scientists around the world, since it is necessary in order to see the DNA. This method requires soaking the gel in a staining solution, such as ethidium bromide or fluorescent dye, which has potential to splash, leading to potential contamination. The typical method involves placing the gel that contains separated DNA into a tray and pouring the staining solution on top, which may result in dripping or contamination. We have developed a simple, easy, and revised method in order to prevent splashing, thus reducing contamination to help.

Revised Method

The revised method involves inclining the staining tray with the staining solution inside by approximately 45 degrees. We achieved this by placing a plastic block underneath. Scientists, however, can use anything that can elevate the tray. Then, we slide the gel into the elevated portion of the tray without visible staining solution. After that, we removed the plastic block and laid the tray down flat, so the gel could be covered in the staining solution and stained.

Conclusion

This simple adjustment to the staining technique will assist in the effort of preventing contamination and splashing of bio-hazardous chemicals while improving the safety of laboratory employees.

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