FLUORESCENT DNA STAINING

MATERIALS

- gel staining dish
- fluorescent stain
- stain waste container
- gloves
- timer or watch
- funnel
- clear square dish
- spatula
- Blue LED transilluminator

CAUTION: Wear gloves when handling fluorescent stain.

TIP: Do not flip your gel when placing it in the tray.

PROTOCOL

Part 1: Preparing the Stain

1. Dilute ____ μl of 10,000x fluorescent stain in ____ ml of 1x TAE to make a 1x fluorescent stain solution.

Part 2: Staining the Gel

2. After running gel electrophoresis, place the gel into a staining tray.
3. Pour 30-40 ml of 1x fluorescent stain into the gel staining tray.
4. Let the gel sit in the stain for 30 minutes.
5. Carefully pour the used stain into the waste container.

Part 3: Visualizing the DNA

6. Using the spatula, carefully place the stained gel into a clear square dish.
7. Place dish with the gel onto the Blue LED transilluminator.
8. Close the cover and turn on the transilluminator.
9. Record your results by taking a picture or using an acetate sheet to draw both the wells and bands.

*To store after staining:

a. Cover the gel in plastic wrap and place in a Ziploc bag.

b. Or, keep the gel in the staining tray, cover in plastic wrap, and store in the refrigerator.

Dilutions for 1x fluorescent stain

<table>
<thead>
<tr>
<th># of Gels</th>
<th>10,000X Fluorescent Stain</th>
<th>1x TAE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4 μl</td>
<td>40 ml</td>
</tr>
<tr>
<td>2</td>
<td>8 μl</td>
<td>80 ml</td>
</tr>
<tr>
<td>4</td>
<td>16 μl</td>
<td>160 ml</td>
</tr>
<tr>
<td>8</td>
<td>32 μl</td>
<td>320 ml</td>
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