PEL Used Media

**Bacterial media:**

**LB Medium (Luria-Bertani Medium)**

- Tryptone: 10 g
- Yeast extract: 5 g
- NaCl: 10 g

Add 900 ml of dH₂O, dissolved, adjust pH to 7.0 with 5N NaOH, adjust volume to 1 liter with dH₂O. Autoclaved for 30 min at 121°C on liquid cycle.

**M9 minimal medium supplied with trace elements**

- Na₂HPO₄: 6.8 g
- KH₂PO₄: 3 g
- NaCl: 0.5 g
- NH₄Cl: 1.0 g

Dissolved in 980 ml of dH₂O, autoclaved for 30 min at 121°C on liquid cycle. After cooled down to < 40°C, add 20 ml of autoclaved 20% glucose (or glycerol), 2 ml of autoclaved 1 M MgSO₄, 0.1 ml of autoclaved 1 M CaCl₂, 2.5 ml of trace element solution. If using E coli strains with \([\Delta(lac-proAB)]\), add additional 3 ml of autoclaved 1 M MgSO₄ and 0.01% thiamine.

The trace element solution is prepared as following:

- FeCl₃·6H₂O: 2.7 g
- ZnCl₂·4H₂O: 0.2 g
- CoCl₂·6H₂O: 0.2 g
- Na₂MoO₄·2H₂O: 0.2 g
- CaCl₂·2H₂O: 0.1 g
- CuCl₂·6H₂O: 0.13 g
- H₃BO₃: 0.05 g
- Concentrated HCl: 10 ml

Make up to 100 ml with d-H₂O.

**HM medium**

- KH₂PO₄: 9 g
- K₂HPO₄: 6 g
- Na₂HPO₄: 4 g
- (NH₄)₂HPO₄: 3 g
Dissolved in 940 ml d-H\textsubscript{2}O, autoclaved for 30 min at 121°C on liquid cycle. After cooled down to < 40°C, add 40 ml of autoclaved 50% glucose (or glycerol), 15 ml of autoclaved 1 M MgSO\textsubscript{4}, 5 ml of trace element solution.

The trace element solution is prepared as following:

<table>
<thead>
<tr>
<th>Compound</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>FeSO\textsubscript{4}</td>
<td>10 g</td>
</tr>
<tr>
<td>ZnSO\textsubscript{4}·7H\textsubscript{2}O</td>
<td>2.5 g</td>
</tr>
<tr>
<td>CuSO\textsubscript{4}·5H\textsubscript{2}O</td>
<td>1 g</td>
</tr>
<tr>
<td>MnSO\textsubscript{4}·5H\textsubscript{2}O</td>
<td>1 g</td>
</tr>
<tr>
<td>CoCl\textsubscript{2}·6H\textsubscript{2}O</td>
<td>1 g</td>
</tr>
<tr>
<td>Na\textsubscript{2}MoO\textsubscript{4}·2H\textsubscript{2}O</td>
<td>1 g</td>
</tr>
<tr>
<td>CaCl\textsubscript{2}·2H\textsubscript{2}O</td>
<td>5 g</td>
</tr>
<tr>
<td>Na\textsubscript{2}B\textsubscript{4}O\textsubscript{7}·10H\textsubscript{2}O</td>
<td>0.2 g</td>
</tr>
</tbody>
</table>

Dissolved in 1 liter of 5 M HCl.