

PEL Used Media

Bacterial media:

LB Medium (Luria-Bertani Medium)

Tryptone	10 g
Yeast extract	5 g
NaCl	10 g

Add 900ml 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

Na ₂ HPO ₄	6.8 g
KH ₂ PO ₄	3 g
NaCl	0.5 g
NH ₄ Cl	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:

FeCl ₃ ·6H ₂ O	2.7 g
ZnCl ₂ ·4H ₂ O	0.2 g
CoCl ₂ ·6H ₂ O	0.2 g
Na ₂ MoO ₄ ·2H ₂ O	0.2 g
CaCl ₂ ·2H ₂ O	0.1 g
CuCl ₂ ·6H ₂ O	0.13 g
H ₃ BO ₃	0.05 g
Concentrated HCl	10 ml

Make up to 100 ml with d-H₂O.

HM medium

KH ₂ PO ₄	9 g
K ₂ HPO ₄	6 g
Na ₂ HPO ₄	4 g
(NH ₄) ₂ HPO ₄	3 g

Dissolved in 940 ml d-H₂O, 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 MgSO₄, 5 ml of trace element solution.

The trace element solution is prepared as following:

FeSO ₄	10 g
ZnSO ₄ ·7H ₂ O	2.5 g
CuSO ₄ ·5H ₂ O	1 g
MnSO ₄ ·5H ₂ O	1 g
CoCl ₂ ·6H ₂ O	1 g
Na ₂ MoO ₄ ·2H ₂ O	1 g
CaCl ₂ ·2H ₂ O	5 g
Na ₂ B ₄ O ₇ ·10H ₂ O	0.2 g
Dissolved in 1 liter of 5 M HCl.	