

Reagents list

Beta-galactosidase (G6008)

- 5000 Units (29mg = lot #084K8629) dissolved in 5 ml PBS so ~1000 units/ml.

Zbuffer-BME

- 0.85 g Na_2HPO_4
- 0.55 g $\text{NaH}_2\text{PO}_4 \cdot \text{H}_2\text{O}$
- 0.07 g KCl
- 0.012 g MgSO_4
 - Dissolved in 100 ml H_2O final volume

β -gal start: ONPG

- 4 mg/ml in Zbuffer-BME

β -gal stop: 1M Na_2CO_3

- 10.6 g in 100 ml

BioRad Reagent

- stock solution is diluted 1:5 to working concentration

BSA standards

- 0.1-1 mg/ml in H_2O

5X M9 Media

- 30 g Na_2HPO_4
- 15 g KH_2PO_4
- 5 g NH_4Cl
- 2.5 g NaCl
 - Dissolved in 1000 ml, and autoclaved.
 - Diluted to working conc of 1X with 1mM MgSO_4 and 2% sugar, as well as any needed antibiotic.

Ampicillin

- 100 mg/ml in H_2O , filter sterilized. Final concentration should be 100 $\mu\text{g/ml}$.

IPTG

- 0.1M in H_2O .
 - Filter sterilized.
 - Final concentration should be 1 mM

Unnatural Amino Acids dissolved according to table in part 1 of today's protocol.