

Tissue Culture Stocks

Pen/Strep (10mg/ml)

Penicillin

Dissolve 60g into 1 Liter of H₂O

- $X(10\text{ml}) = 2000\text{units/ml}$ (500ml serum)
- 2000units/ml represents 10x so when added to media the final concentration = 200units/ml
- $x = 1 \times 10^5$ units/ml needed
- ♣ penicillin concentration = 1,666units/mg
 - $(\text{mg}/1666\text{units})(1 \times 10^5\text{units/ml}) = 60\text{mg/ml}$
 - Want 1 Liter thus $(60\text{mg/ml})(1000/\text{L}) = 60\text{g}$

Streptomycin

- ♣ Dissolve 100g in the 1 Liter of H₂O above (10mg/ml)
 - Want 1g Strep/10ml of Solution
 - Final concentration in media = 200 μ g/ml
 - MW 1457g/mol
- ♣ Filter (0.2 μ m bottle-top filter) and aliquot 10ml in 15ml Falcon.
- ♣ Working stock will be diluted in 500ml serum

Puromycin (1mg/ml)

- ♣ Located in freezer next to Bill's office
- ♣ Dissolve 1mg (powder = 544.4g/mol) in 1ml PBS to create stock solution
- ♣ For 25ml:
 - 25mg Puro
 - ~25ml PBS
 - Filter (0,2 μ m filter)
 - Aliquot 10ml into 15ml Falcon
- ♣ Working stock is made by diluting 1:10
 - 10ml tube (1mg/ml) into 90ml PBS

Hygromycin (10mg/ml)

- ♣ Dissolve 10mg/ml in PBS
- ♣ For 1L, filter, and aliquot into 100ml bottles:
 - Dissolve 10g in 1L PBS
- ♣ Working stock is diluted 100x

G418 (100mg/ml)

- ♣ For 500ml: (
 - Dissolve 50g into 500ml PBS, filter, and aliquot into 100ml bottles

Trypsin (1x)

- ♣ Bottle (Gibco) is 10x (stockroom)
 - Pour 100ml out from 1L bottle of sterile PBS and replace by pouring (100ml) of 10x trypsin into PBS
 - DON'T FILTER
 - Aliquot into 100ml bottles