

## Medium Preparation from 1x Stock (DMEM w/ 10% CS)

### Outline

Check medium formulation, then add serum and antibiotics from stock concentrates to obtain final concentration of 10% CS (calf serum) and 1% PenStrep (100 U/mL Penicilium and 100 µg/mL Streptomycin).

### Materials

#### *Sterile*

- Growth medium, Mediatech cellgro DMEM (Cat. No. 10-013-CV), 500 mL
- Newborn Calf Serum stock, heat inactivated, Sigma (Cat. No. N4762), 50 mL
- PenStrep stock (10,000 U/mL Pen, 10 mg/mL Strep), Mediatech (Cat. No. 30-002-CI), 5 mL
- Pipettes, 5 mL, 50 mL

#### *Nonsterile*

- Gloves
- Pipette Aid
- Alcohol, 70% in spray bottle
- Marker pen
- Kimwipes

### Protocol

1. Prepare hood by swabbing with 70% alcohol
2. Collect materials and reagents and place them in biosafety hood, swab with 70% alcohol
3. Check medium formulation on the bottle
4. Thaw calf serum and PenStrep stocks at room temperature
5. Add 50 mL of CS stock to medium
6. Add 5 mL of PenStrep stock to medium
7. Recap bottles
8. Record the additions on the medium bottle, date and initial medium bottle
9. Return medium bottle to 4°C
10. Use medium within 3 weeks of preparation
11. Clean hood by swabbing with 70% alcohol

### NOTE

Half life of antibiotics is quite short at 37°C, ~2 days for Penicillin and ~4 days for Streptomycin. It is useful to aliquot PenStrep and serum stock concentrates. Thaw aliquots as needed for medium preparation.