DMEM High Glucose

DMEM High Glucose is prepared from a powder media preparation.

- DMEM is from Sigma Catalog Number D5648
  - Contains 4.5 g/liter glucose and 0.584 g/liter L-glutamine.
  - Location: Small Brown Bottles in Refrigerator
- Fetal Bovine Serum from Atlanta Biologicals Catalog Number S11050
  - Location: Freezer or -80 freezer
- Penicillin / Streptomycin from ATCC Catalog Number 30-2300 it is at 100X
  - Stock Concentration is 10,000 IU Penicillin and 10,000 µg/ml Streptomycin
  - Location: Freezer
- G418 is from MP Biomedicals Catalog Number 1672548
  - 50 mg/ml solution
  - culture hood

DMEM Base Media Preparation (1 liter)

1. Empty 1 bottle of DMEM powder into approximately 500 ml Millipore water.
   a. Rinse bottle with Millipore water into the solution
2. Add 2.1 g NaHCO₃ (Sodium Bicarbonate)
3. pH to 7.2
4. Q.S. volume to 1 liter using Millipore water.
5. If storing media at this point, filter sterilize and label as DMEM Base

DMEM 10% FBS with Pen/Strep (500 ml)

1. 445 ml DMEM Base
2. 50 ml FBS
3. 5 ml Pen/Strep Stock (100X; 10,000 IU Penicillin and 10,000 µg/ml Streptomycin)
4. Filter Sterilize
5. Aliquot into 100 ml bottles (Never leave in 500 or 1000 ml bottles)

DMEM 0.5% FBS with Pen/Strep (500 ml)

1. 492.5 ml DMEM Base
2. 2.5 ml FBS
3. 5 ml Stock Pen/Strep (100X; 10,000 IU Penicillin and 10,000 µg/ml Streptomycin)
4. Filter Sterilize
5. Aliquot into 100 ml bottles (Never leave in 500 or 1000 ml bottles)
   a. Aliquot using 25 or 50 ml serological pipettes in culture hood

DMEM Complete Selection Media (50 ml)

1. 45 ml DMEM Base
2. 5 ml FBS
3. 1 ml of G418 Stock Concentration 50 mg/ml, final conc 1 mg/ml
4. Filter Sterilize
5. DMEM 10% FBS G418 Selection
DMEM 10% FBS G418 Maintenance Media (500 ml)
1. 447.5 ml DMEM Base
2. 50 ml FBS
3. 2.5 ml of G418 Stock (Concentration 50 mg/ml) final conc 0.25 mg/ml G418
4. Filter Sterilize
5. Aliquot into 100 ml bottles (Never leave in 500 or 1000 ml bottles)
   a. Aliquot using 25 or 50 ml serological pipettes in culture hood
6. Label

DMEM Complete Primocin Media (500 ml)
1. 500 ml DMEM Base
2. 50 ml FBS
   a. 1 ml Primocin Stock (Concentration 50 mg/ml) final conc 0.1 mg/ml Primocin
3. Filter Sterilize
4. Aliquot into 100 ml bottles (Never leave in 500 or 1000 ml bottles)
   b. Aliquot using 25 or 50 ml serological pipettes in culture hood
5. Label