

# REAGENTS FOR PREPARATION OF TISSUE CULTURE MEDIA

## **I**

**FBS** = Fetal Bovine Serum  
Atlanta Biologicals cat # S11150  
aliquoted 10 ml/tube and stored at -20°C

**XS** = Xenopus Serum

**Amph**

### **FHM Medium**

Used for FHM cells

200 ml MEM Eagle (M-1018)  
8 ml FBS  
5 ml Pen-Strep  
500 µl Kanamycin

Filter thru 0.2 um filter and store at 4°C

### **OTHER REAGENTS FOR TISSUE CULTURE**

**BSA** = Bovine Serum Albumin  
Sigma A-4503 100 grams

**EDTA** = Ethylenediaminetetraacetic Acid (Disodium, Dihydrate MW 372.2)  
Sigma E-5134

### **Amphibian Phosphate Buffered Saline (APBS)**

	<u>For 20 Liters</u>
Sodium Chloride (NaCl) 6.6 g/L	132 grams
Sodium Phosphate (Na <sub>2</sub> HPO <sub>4</sub> ) 1.15 g/L	23 grams
Potassium Phosphate (KH <sub>2</sub> PO <sub>4</sub> ) 0.2 g/L	4 grams

pH to 7.7 with 10N NaOH  
Filter thru 0.2um filter as needed for tissue culture work

### **APBS + 1% BSA**

Used as a blocking solution  
Add 10 grams BSA to 700mls of APBS  
Stir well until dissolved  
Adjust volume to 1 Liter by adding additional APBS  
Filter thru 0.2um filter and store at 4°C

**APBS + 0.1% EDTA**

Used to remove adherant cells

Add 0.3 grams EDTA to 250 mls of APBS

Stir well until dissolved (may need to heat slightly to get into solution)

Adjust volume to 300 mls by adding additional APBS

Filter thru 0.2um filter and store at 4°C

**RPMI 1640 Medium** (For 1 Liter)

1 package of powder (Gibco cat #

10mls PS

1ml 2-Me

2g's NaHCO<sub>3</sub>

pH to 7.0 with HCL

Filter thru 0.2um filter and store at 4°C

## **FREEZING and THAWING CELLS**

### PREPARE FREEZING MEDIUM:

50% Medium (appropriate for cell line being frozen)

50% FBS

To this add 10% Hybridmax DMSO (Sigma cat # D-2650)

A batch can be made and aliquots can be frozen at -20°C

### FREEZING:

1. Count cells to be frozen
2. Spin and resuspend at  $1 \times 10^6$  to  $5 \times 10^6$ /ml in cold freezing medium
3. Aliquot 1ml/freezing vial - keep on ice
4. Cells can be frozen in the nitrogen storage facility (ATRF)  
You need to contact Colleen x5-1778 to set up an appointment in advance  
You also need to have a control vial = freezing medium only
5. Colleen will place the vials in liquid N<sub>2</sub> when the freezing is complete
6. Be sure to map out what cell line was frozen and where it was placed

### THAWING:

1. Remove vial from liquid N<sub>2</sub> and place it on ice (call ahead)
2. Immediately when returning to the lab suspend the vial in water to thaw  
NOTE: It is very important that the vial only be suspended until it starts to thaw. Watch it carefully, as soon as the ice starts to melt remove it and thaw the rest of the way in your hand!
3. Dilute the vial as desired in pre-warmed medium (10% FBS) and place it at appropriate temperature as soon as possible.

#### Example:

Normally for a 1ml vial frozen at  $5 \times 10^6$ /ml I thaw as follows:

1. In a six well plate set up three wells with different amounts of cells  
1ul, 2ul and 10uls of cells in a total volume of approximately 5 ml
2. In a small - medium sized flask, put the remainder of the cells in  
10-30mls of medium
4. Watch cells carefully over the first 24 hours and split as necessary  
If the cell line is adherent, after the viable cells stick, the medium can be removed and replaced with fresh medium