

Solutions

Puck's Saline G			
	vol (for 1 liter) of stock		mg/liter
CaCl₂·2H₂O (0.11 mM)	1.1 ml	100 mM	16
MgSO₄·7H₂O (0.62 mM)	6.2 ml	100 mM	154
KCl (5.36 mM)	1.8 ml	3 M	400
KH₂PO (1.1 mM)	11 ml	100 mM	150
NaCl (137 mM)			8000
Na₂HPO₄·7H₂O (1.08 mM)	10.8 ml	100 mM	290
glucose			1100
phenol red	5 ml	0.1%	5

Dissolve above compounds in ~900 ml, bring to pH 7.0. Add distilled H₂O and bring volume to 1 liter. Filter through sterile Millipore filter into sterile medium bottles. Store at 4°C.

Hanks' Balanced-Salt Solution			
	vol (for 1 liter) of stock		mg/liter
NaCl (137 mM)			8000
KCl (5.36 mM)	1.8 ml	3 M	400
CaCl₂·2H₂O (1.26 mM)	12.6 ml	100 mM	185
MgCl₂·6H₂O (0.5 mM)	5 ml	100 mM	100
MgSO₄·7H₂O (0.4 mM)	4 ml	100 mM	100
Na₂HPO₄·7H₂O (0.34 mM)	3.4 ml	100 mM	90
KH₂PO₄ (0.44 mM)	4.4 ml	100 mM	60
NaHCO₃ (4.2 mM)			350
Glucose			1000
Phenol Red	10 ml	0.1%	10

Dissolve above compounds in ~900 ml, bring to pH 7.0. Add distilled H₂O and bring volume to 1 liter. Filter through sterile Millipore filter into sterile medium bottles. Store at 4°C.

Phosphate Buffered Saline (Dulbecco)--Solution A			
	vol (for 1 liter) of stock		mg/liter
NaCl (137 mM)			8000

KCl (2.68 mM)	0.9 ml	3 M	200
Na₂HPO₄·7H₂O (8 mM)			2160
KH₂PO₄ (1.47 mM)	14.7 ml	100 mM	200
phenol red (optional)	10 ml	0.1%	10

Dissolve above compounds in ~900 ml, bring to pH 7.0. Add distilled H₂O and bring volume to 1 liter. Autoclave (10 lb/in² for 15 min) or filter through sterile Millipore filter into sterile medium bottles. Store at 4°C. Can be used by itself.

Most of the time, Solution A can be used by itself. To add Calcium and Magnesium, do the following.

Prepare Solution A, bring the final volume to 800 ml instead of 1000 ml.

Solution B			
	vol (for 100 ml) of stock		mg/100 ml
CaCl₂ (9 mM)	9 ml	100 mM	133 (2H ₂ O)
Solution C			
	vol (for 100 ml) of stock		mg/100 ml
MgCl₂ (5 mM)	5 ml	100 mM	

Prepare and sterilize each solution separately. Store at room temperature. To use: Add 8 parts of A to 1 part B and 1 part C.
