

Table S1. Complete Formulation for TeSR1 Medium

INORGANIC SALTS	mM	AMINO ACIDS	mM
Calcium chloride (Anhydrous)	8.24E-01	L-Alanine	1.37E-01
HEPES	1.18E+01	L-Arginine hydrochloride	5.48E-01
Lithium Chloride (LiCl)	9.80E-01	L-Asparagine-H2O	1.37E-01
Magnesium chloride (Anhydrous)	2.37E-01	L-Aspartic acid	1.37E-01
Magnesium Sulfate (MgSO4)	3.19E-01	L-Cysteine-HCl-H2O	7.83E-02
Potassium chloride (KCl)	3.26E+00	L-Cystine 2HCl	7.83E-02
Sodium bicarbonate (NaHCO3)	1.80E+01	L-Glutamic acid	1.37E-01
Sodium chloride (NaCl)	9.46E+01	L-Glutamine	2.94E+00
Sodium phosphate, dibas (Anhydrous)	3.92E-01	Glycine	2.94E-01
Sodium phosphate, mono. (NaH2PO4-H2O)	3.55E-01	L-Histidine-HCl-H2O	1.18E-01
		L-Isoleucine	3.26E-01
		L-Leucine	3.54E-01
		L-Lysine hydrochloride	3.91E-01
		L-Methionine	9.06E-02
		L-Phenylalanine	1.69E-01
		L-Proline	2.16E-01
		L-Serine	2.94E-01
		L-Threonine	3.52E-01
		L-Tryptophan	3.46E-02
		L-Tyrosine 2Na 2H2O	1.68E-01
		L-Valine	3.55E-01
TRACE MINERALS		VITAMINS	
Ferric Nitrate (Fe(NO3)3-9H2O)	9.71E-05	Ascorbic acid	2.53E-01
Ferric sulfate (FeSO4-7H2O)	1.18E-03	Biotin	1.12E-05
Cupric sulfate (CuSO4-5H2O)	4.08E-06	B12	3.94E-04
Zinc sulfate (ZnSO4-7H2O)	1.18E-03	Choline chloride	5.03E-02
Ammonium Metavanadate NH4VO3	1.09E-05	D-Calcium pantothenate	3.69E-03
Mangenous Sulfate Mn SO4 H2O	1.97E-06	Folic acid	4.71E-03
NiSO4 6H2O	9.70E-07	i-Inositol	5.49E-02
Selenium	1.77E-04	Niacinamide	1.30E-02
Sodium Meta Silicate Na2SiO3 9H2O	9.66E-04	Pyridoxine hydrochloride	7.62E-03
SnCl2	1.24E-06	Riboflavin	4.56E-04
Molybdic Acid, Ammonium salt	1.97E-06	Thiamine hydrochloride	2.42E-02
CdCl2	1.22E-05		
CrCl3	1.98E-06	GROWTH FACTORS/PROTEINS	
AgNO3	9.81E-07	GABA	9.79E-01
AlCl3 6H2O	4.87E-06	Pipecolic Acid	9.84E-04
Ba (C2H3O2)2	9.79E-06	bFGF	5.77E-06
CoCl2 6H2O	9.81E-06	TGF beta 1	2.35E-08
GeO2	4.97E-06	Human Insulin	3.92E-03
KBr	9.89E-07	Human Holo-Transferrin	1.37E-04
KI	1.00E-06	Human Serum Albumin	1.95E-01
NaF	9.83E-05	Glutathione (reduced)	6.38E-03
RbCl	9.81E-06		
ZrOCl2 8H2O	9.80E-06	OTHER COMPONENTS	
		Hypoxanthine Na	1.18E-02
		Phenol red	1.69E-02
		Putrescine-2HCl	3.95E-04
		Thymidine	1.18E-03
		2-mercaptoethanol	9.80E-02
		Pluronic F-68	2.33E-02
		Tween 80	3.29E-04
ENERGY SUBSTRATES			
D-Glucose	1.37E+01		
Sodium Pyruvate	3.92E-01		
LIPIDS			
Linoleic Acid	1.88E-04		
Lipoic Acid	4.00E-04		
Arachidonic Acid	1.29E-05		
Cholesterol	1.12E-03		
DL-alpha tocopherol-acetate	2.90E-04		
Linolenic Acid	6.99E-05		
Myristic Acid	8.59E-05		
Oleic Acid	6.94E-05		
Palmitic Acid	7.65E-05		
Palmitoleic acid	7.71E-05		
Stearic Acid	6.89E-05		