

**Suppl. Table 1** Culture medium composition

	<b>MES</b>	<b>OV</b>	<b>OC</b>
DMEM/F12 solution (Gibco)	500ml	500ml	500ml
Sodium pyruvate 100 mM (Sigma)	5.5 ml	5.2 ml	5.2 ml
Non-essential amino acids (Gibco)	5.5 ml	5.2 ml	5.2 ml
Antibiotic-Antimycotic (Gibco)	5.5 ml	5.2 ml	5.2 ml
Chemically defined lipid concentrate (Gibco)	-	5.2 ml	5.2 ml
Fetal Bovine Serum (Gibco)	55 ml	7.6 ml	-
LIF	1000 UI/ml	-	-
Insulin Transferrin Selenium-Ethanolamine (ITS-X 100X) (Gibco)	-	1 ml	-
N-Acetyl-L-Cystein (NAC) 0.5mM stock solution	-	1.25 ml	1.25 ml
b-Mercaptoethanol 16M (Sigma)	4 ul	4 ul	4 ul
NS21 supplement	-	-	10 ml
Forskolin	-	10 uM	10 uM
Retinoic Acid (Sigma)	-	-	0.5 uM
Taurine (Sigma)	-	-	1 mM
Retinoic Acid Receptor Antagonist (Tocris)	-	1 uM	-