

### Supplementary Table 3

#### Medium Composition

Name	Concentration	Manufacturer	Code
ADF	18.45% V/V	Thermo Fischer	12634
conditioned Wnt3A-medium (as in Willert et al), 25%	50% V/V		
conditioned R-spondin1 medium	25% V/V		
4-(2-hydroxyethyl)-1-piperazineethanesulfonic acid	10 mM	Thermo Fischer	15630-056
glutamax	1% V/V	Thermo Fischer	35050-087
B27	2% V/V	Thermo Fischer	17504044
N2	1% V/V	Thermo Fischer	17502048
human epidermal growth factor (EGF)	20 ng/ml	Thermo Fischer	PHG0311
human noggin (Peprotech)	150 ng/ml	Peprotech	120-10C-1000
human fibroblast growth factor (FGF)-10	150 ng /ml	Peprotech	100-26-1000
nicotinamide	10 mM	Sigma	N0636
human gastrin	10 nM	Sigma	G9145
A83-01	1 $\mu$ M	Calbiochem	616454
Y-27632*	7.5 $\mu$ M	Sigma	Y0503

\*reduced to 1.5  $\mu$ M after 3rd day