

Materials List for

## Culture Methods to Study Apical-Specific Interactions using Intestinal Organoid Models

Georgios Stroulios\*<sup>1</sup>, Martin Stahl\*<sup>2</sup>, Fisal Elstone\*<sup>2</sup>, Wing Chang<sup>1</sup>, Sharon Louis<sup>2</sup>, Allen Eaves<sup>2,3</sup>, Salvatore Simmini<sup>1</sup>, Ryan K. Conder<sup>2</sup>

## Citation Salvatore Simmini Salvatore.simmini@stemcell.com Ryan K. Conder ryan.conder@stemcell.com Pate Published March 23, 2021 Citation Stroulios, G., Stahl, M., Elstone, F., Chang, W., Louis, S., Eaves, A., Simmini, S., Conder, R.K. Culture Methods to Study Apical-Specific Interactions using Intestinal Organoid Models. J. Vis. Exp. (169), e62330, doi:10.3791/62330 (2021). Date Published DOI URL 10.3791/62330 jove.com/video/62330

## **Materials**

Name	Company	Catalog Number	Comments
Anti-Adherence Rinsing Solution	STEMCELL Technologies Inc.	7010	For coating cultureware. Referred as anti-adherent solution into the main text.
Conical tubes, 15 mL	STEMCELL Technologies Inc.	38009	
Corning Matrigel Matrix, Growth Factor Reduced (GFR), Phenol Red- Free	Corning	356231	Extracellular matrix (ECM) for maintenance and establishment of organoid lines.
Costar 6.5 mm or 12 mm Transwell inserts	STEMCELL Technologies Inc.	38023/38024	For 2D Monolayer culture.
Costar 24 Well Flat-Bottom, Tissue culture-treated plate	STEMCELL Technologies Inc.	38017	For maintenance and establishment of organoid lines.
D-PBS (Without Ca++ and Mg++)	STEMCELL Technologies Inc.	37350	For washing
Dimethyl sulfoxide (DMSO)	Millipore Sigma	D2650	Reconstitution of small molecules
DMEM/F-12 with 15 mM HEPES	STEMCELL Technologies Inc.	36254	For washing
Gentle Cell Dissociation Reagent (GCDR)	STEMCELL Technologies Inc.	7174	For Matrigel removal. Referred as dissociation reagent into the main text.
IntestiCult Organoid Growth Medium (Human)	STEMCELL Technologies Inc.	6010	For expansion of organoid lines prior to differentiation. Referred as Intestinal Organoid Expansion Medium into the main text.
IntestiCult Organoid Differentiation Medium (Human)	STEMCELL Technologies Inc.	100-0214	For establishment of monolayers and 3D differentiation. Referred as Intestinal Organoid Differentiation Medium into the main text.
Trypsin-EDTA (0.05%)	STEMCELL Technologies Inc.	7910	For 2D Monolayer establishment.
Y-27632	STEMCELL Technologies Inc.	72302	RHO/ROCK pathway inhibitor, Inhibits ROCK1 and ROCK2. Used for 2D monolayer establishment.
Wide bore tips	Corning	#TF-1005-WB-R-S	Organoids handling

<sup>&</sup>lt;sup>1</sup>STEMCELL Technologies Ltd. <sup>2</sup>STEMCELL Technologies Inc. <sup>3</sup>Terry Fox Laboratory, BC Cancer

<sup>\*</sup>These authors contributed equally