

Materials List for

Generation of Human Kidney Tubuloids from Tissue and Urine

Camilla Calandrini^{1,2}, Jarno Drost^{1,2}

¹Princess Máxima Center for Pediatric Oncology ²Oncode Institute

Corresponding Author

Jarno Drost

J.Drost@prinsesmaximacentrum.nl

Citation

Calandrini, C., Drost, J. Generation of Human Kidney Tubuloids from Tissue and Urine. *J. Vis. Exp.* (170), e62404, doi:10.3791/62404 (2021).

Date Published

April 16, 2021

DOI

10.3791/62404

URL

jove.com/video/62404

Materials

Name	Company	Catalog Number	Comments
A83-01	Tocris	2939/10	Stock of 5 mM, final concentration of 5 μ M, activin receptor-like kinase 5 inhibitor
Advanced DMEM/F12	ThermoFisher Scientific	12634010	
antiPAX8 antibody	LSBio	LS-B13466	
B27 supplement	ThermoFisher Scientific	17504044	Stock of 50x, final concentration of 1x
BME	Trevigen	3533-010-02	
Collagenase	Sigma Aldrich	C9407	Stock of 10 mg/mL, final concentration of 1 mg/mL
EGF	Peptotech	AF-100-15	Stock of 0.5 mg/mL, final concentration of 50 ng/mL
FGF10	Peptotech	100-26	Stock of 0.1 mg/mL, final concentration of 100 ng/mL
GlutaMAX - L-alanine/L-glutamine	Gibco	35050061	Stock of 100x, final concentration of 1x
Hepes	Gibco	15630106	Stock of 1 M, final concentration of 10 mM
Multiwell tissue culture plates 12 wells	CELLSTAR	665180	
Multiwell tissue culture plates 24 wells	CELLSTAR	662160	
Multiwell tissue culture plates 6 wells	CELLSTAR	657160	
N-acetylcysteine	Sigma Aldrich	A9165	Stock of 500 mM, final concentration of 1.25 mM
Penicillin/Streptomycin	Gibco	15140163	Stock of 10.000 U/mL, final concentration of 100 U/mL
Primocin - broad-range antibiotics	Invivogen	ant-pm-1	Stock of 50 mg/mL, final concentration of 0.1 mg/mL
Red blood cells lysis buffer	Roche	11814389001	
RhoKinase inhibitor Y-27632	Abmole Bioscience	M1817	Stock of 100 mM, final concentration of 10 μ M

R-spondin conditioned medium			Produced in house with the use of stable cell lines generated by Calvin Kuo lab. Final concentration is 10%
TrypLe Express/ trypsin replacement agent	ThermoFisher Scientific	12605010	