

# Three-Dimensional Cell Culture Models to Investigate the Epithelial Barrier in Eosinophilic Esophagitis

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jove.com/video/66503

## Materials

Name	Company	Catalog Number	Comments
1250 µL Griptip - Filter	Integra	4445	
300 µL Griptip - Filter	Integra	4435	
70 µM cell strainer	Sarstedt	83.3945.070	
Ascorbic Acid	Sigma-Aldrich (Merck)	A4544	
Bovine pituitary extract	Gibco (Thermo Fischer Scientific)	3700015	
Calcium chloride	Sigma-Aldrich (Merck)	21115	
Cell Culture Multiwell Plates CELLSTAR for suspension cultures	Greiner Bio-One	7.657 185	
Cultrex Basement Membrane Extract (BME), Type 2, Pathclear	R&D Systems (Bio-Techne)	3532-010-02	
Dimethyl sulfoxide (DMSO), >99,5% BioScience Grade	Carl Roth	A994	
Dispase I	Corning	354235	
Dispase II	Sigma-Aldrich (Merck)	D4693	
Dulbeccos Phosphate Buffered Saline (DPBS)	Sigma-Aldrich (Merck)	D8537	
EVE Automated Cell Counter	NanoEntek	EVE-MC	
EVE Cell counting slide	NanoEntek	EVS-050	
Falcon 5 mL Round Bottom Polystyrene Test Tube, with Cell Strainer Snap Cap	Falcon	352235	
Fluorescein isothiocyanate (FITC)-dextran	Sigma-Aldrich (Merck)	FD4	average mol wt 3000-5000
Heraeus - Megafuge 40R	Thermo Fisher Scientific	75004518	
Human recombinant epidermal growth factor	Gibco (Thermo Fischer Scientific)	3700015	
Keratinocyte-SFM	Gibco (Thermo Fischer Scientific)	17005042	
Penicillin-Streptomycin	Gibco (Thermo Fischer Scientific)	15140122	
Recombinant Human KGF/FGF-7 Protein	R&D Systems (Bio-Techne)	251-KG-010/CF	
Screw cap tube, 15 mL	Sarstedt	62.554.502	

Single Channel EVOLVE 100-1000 $\mu$ L	Integra	3018	
Single Channel EVOLVE 20-200 $\mu$ L	Integra	3016	
Syringe 1 mL		1134950	
ThermoMixer C	Eppendorf	5382000015	
Trypsin inhibitor from Glycine max (soybean)	Sigma-Aldrich (Merck)	T9128	
Trypsin-EDTA	SAFC Biosciences (Merck)	59418C	
Y27632 dihydrochloride	Tocris (Bio-Techne)	1254	