

Materials List for:

Multimodal Quantitative Phase Imaging with Digital Holographic Microscopy Accurately Assesses Intestinal Inflammation and Epithelial Wound Healing

Philipp Lenz^{1,2}, Markus Brückner¹, Steffi Ketelhut³, Jan Heidemann⁴, Björn Kemper^{*3}, Dominik Bettenworth^{*1}

¹Department of Medicine B, University Hospital Münster

²Institute of Palliative Care, University Hospital Münster

³Biomedical Technology Center, University of Münster

⁴Department of Gastroenterology, Klinikum Bielefeld

* These authors contributed equally

Correspondence to: Björn Kemper at bkemper@uni-muenster.de

URL: <https://www.jove.com/video/54460>

DOI: [doi:10.3791/54460](https://doi.org/10.3791/54460)

Materials

Name	Company	Catalog Number	Comments
Reagents			
Azoxymethane (AOM)	Sigma - Aldrich, Deisenhofen, Germany	A5486	
Cell Culture Flask	Greiner Bio-One, Frickenhausen, Germany	658170	
Costar Stripette	Corning Inc., New York, USA	4488	
Dextran sulphate sodium (DSS)	TdB Consultancy, Uppsala, Sweden	DB001	
DMEM/Ham's F12	PAA Laboratories - Pasching - Austria	E15-813	
EGF	Sigma - Aldrich, Deisenhofen, Germany	SPR3196	
Ethylenediaminetetraacetic acid (EDTA)	Sigma - Aldrich, Deisenhofen, Germany	E 9884	
Falcon Tube 50 ml	BD Biosciences, Erembodegem, Belgium	352070	
Isopentane (2-Methylbutane)	Sigma - Aldrich, Deisenhofen, Germany	M32631-1L	
Methylene blue	Merck, Darmstadt, Germany	1159430025	
Mitomycin C	Sigma - Aldrich, Deisenhofen, Germany	M4287	
Microscope Slides	G. Menzel, Braunschweig, Germany	J1800AMNZ	
O.C.T. Tissue Tek compound	Sakura, Zoeterwoude, Netherlands	4583	
Pen/Strep/Amphotericin B	Lonza, Verviers, Belgium	1558	
Phosphate buffered saline, PBS	Lonza, Verviers, Belgium	4629	
RPMI 1640	Lonza, Verviers, Belgium	3626	
Sodium Chloride 0.9%	Braun, Melsungen, Germany	5/12211095/0411	
Standard diet	Altromin, Lage, Germany	1320	
Tissue-Tek Cryomold	Sakura, Leiden, Netherlands	4566	
Trypsin EDTA	Lonza, Verviers, Belgium	7815	
Vitro – Clud	R. Langenbrinck, Teningen, Germany	04-0002	

μ -Dish 35 mm with Culture-Insert, high	ibidi GmbH, Munich, Germany	81176	
DIC Lid for μ -Dishes, with a glass insert	ibidi GmbH, Munich, Germany	80050	
Equipment			
MICROM HM550	Thermo Fisher Scientific, Inc., Waltham, USA	46320	
Digital holographic microscope			
Component	Model	Company	
Inverted Microscope	iMIC	Till Photonics, Graefelfing, Germany	
Laser	Compass 315M	Coherent GmbH, Luebeck, Germany	
Microscope lens	Zeiss EC Plan Neofluar 10x/0.3	Zeiss, Goettingen, Germany	
CCD camera	DMK 41BF02	The Imaging Source, Bremen, Germany	