

Materials List for:

# Imaging- and Flow Cytometry-based Analysis of Cell Position and the Cell Cycle in 3D Melanoma Spheroids

Kimberley A. Beaumont<sup>1,2</sup>, Andrea Anfosso<sup>1,2</sup>, Farzana Ahmed<sup>3</sup>, Wolfgang Weninger<sup>\*1,4,5</sup>, Nikolas K. Haass<sup>\*1,3,5</sup>

<sup>1</sup>The Centenary Institute

<sup>2</sup>Sydney Medical School, University of Sydney

<sup>3</sup>The University of Queensland Diamantina Institute, Translational Research Institute, The University of Queensland

<sup>4</sup>Department of Dermatology, Royal Prince Alfred Hospital

<sup>5</sup>Discipline of Dermatology, University of Sydney

\* These authors contributed equally

Correspondence to: Kimberley A. Beaumont at [k.beaumont@centenary.org.au](mailto:k.beaumont@centenary.org.au)

URL: <https://www.jove.com/video/53486>

DOI: [doi:10.3791/53486](https://doi.org/10.3791/53486)

## Materials

Name	Company	Catalog Number	Comments
Hoechst 33342	Life Technologies	H3570	
agarose low melting point	Life Technologies	16520-050	For sectioning
noble agar	Sigma	A5431	For making spheroids
agarose for spheroids	Fisher Scientific	BP1356-100	For making spheroids
0.05% trypsin/EDTA	Life Technologies	25300-054	
HBSS	Life Technologies	14175-103	
10% formalin	Sigma	HT5014-1CS	CAUTION: Harmful, corrosive. Use Personal Protective Equipment, do not breath fumes (open in a fume cupboard).
live/dead near IR	Life Technologies	L10119	
vibratome	Technical Products International, Inc		
coulture cup	Thermo-Fisher Scientific	SIE936	Mold for sectioning spheroids
hemocytometer	Sigma	Z359629	
96-well tissue culture plate	Invitro	FAL353072	
collagenase	Sigma	C5138	
confocal microscope	Leica	TCS SP5	
Flow cytometer analyser	Becton Dickinson	LSRFortessa	
volocity	PerkinElmer		Imaging software
flowjo	Tree Star		Flow cytometry software
Vacuum grease	Sigma	Z273554	
Mounting media	Vector Laboratories	H1000	
FUCCI (commercial constructs)	Life Technologies	P36238	Transient transfection only
Cell strainer 70 µm	In Vitro	FAL352350	
Round bottom 5 ml tubes (sterile)	In Vitro	FAL352003	
Round bottom 5 ml tubes (non-sterile)	In Vitro	FAL352008	