

Materials List for:

Through the Looking Glass: Time-lapse Microscopy and Longitudinal Tracking of Single Cells to Study Anti-cancer Therapeutics

Russell T. Burke¹, James D. Orth¹

¹Department of Molecular, Cellular, and Developmental Biology, University of Colorado, Boulder

Correspondence to: James D. Orth at James.Orth@colorado.edu

URL: <https://www.jove.com/video/53994>

DOI: [doi:10.3791/53994](https://doi.org/10.3791/53994)

Materials

Name	Company	Catalog Number	Comments
Taxol (paclitaxel)	Sigma	T7191	microtubule stabilizing drug
Etoposide	Selleckchem	S1225	topoisomerase II inhibitor
Selinexor	Karyopharm Therapeutics	na	XPO1/CRM1 inhibitor, gift
Kinesin-5 inhibitor	Merck Serono	na	gift, also available from American Custom Chemicals Corporation. CAS 858668-07-2
Cell growth medium	HyClone (Fisher) or Mediatech		many companies available
5% CO2/balance air, certified	Airgas	Z03NI7222004379	
35 mm Dish, 20 mm glass bottom	Cellvis	D35-20-1.5-N	many companies available
35 mm 4-well Dish, 20 mm glass bottom	Cellvis	D35C4-20-1.5-N	many companies available
35 mm Dish, gridded glass bottom	MatTek	P35G-2-14-CGRD	many companies available
Multi-well, glass bottom	Cellvis	P12-1.5H-N	many companies available
Olympus IX81 inverted epifluorescence microscope	Olympus		
Olympus IX2-UCB controller	Olympus		
PRIOR LumenPro200	Prior Scientific	Lumen200PRO	
PRIOR Proscan III motorized stage	Prio Scientific	H117	
STEV chamber	InVivo Scientific	STEV.ECU.HC5 STAGE TOP	
Environmental Controller Unit	InVivo Scientific	STEV.ECU.HC5 STAGE TOP	
Hamamatsu ORCA R2 CCD with controller	Hamamatsu	C10600	
Nikon Eclipse Ti	Nikon		
Nikon laser launch	Nikon		
SOLA light engine	lumencor		
iXon Ultra 897 EM-CCD	ANDOR		
TOKAI HIT incubation chamber	TOKAI HIT	TIZSH	