

Materials List for:

An Organotypic High Throughput System for Characterization of Drug Sensitivity of Primary Multiple Myeloma Cells

Ariosto Silva¹, Timothy Jacobson¹, Mark Meads¹, Allison Distler¹, Kenneth Shain¹

¹Department of Cancer Imaging and Metabolism, H. Lee Moffitt Cancer Center and Research Institute

Correspondence to: Ariosto Silva at Ariosto.Silva@moffitt.org

URL: <https://www.jove.com/video/53070>

DOI: [doi:10.3791/53070](https://doi.org/10.3791/53070)

Materials

Name	Company	Catalog Number	Comments
EVOS FL AUTO	AMG	AMAFD1000 + AMC1000	Digital microscope equipped with motorized stage and bench top incubator.
384-well plate CellBind	CORNING	CLS3683 SIGMA	Corning CellBIND 384 well plates 384 well plate, polystyrene, CellBIND surface, sterile, clear flat bottom, black, w/lid
1,536-well plate CellBind	CORNING	CLS3832 ALDRICH	Corning 1,536 well plates, low base, surface treatment CellBIND, sterile
Ficoll-Paque Plus	GE Healthcare	GE17-1440-02 SIGMA	For <i>in vitro</i> isolation of lymphocytes from human peripheral blood.
CD138 magnetic beads	Miltenyi	130-051-301	Antibody conjugated magnetic beads for selection of CD138+ cells.
LS columns	Miltenyi	130-042-401	Column for separation of cells.
MidiMACS Separator	Miltenyi	130-042-302	Magnet for separation column.
Matrigel	Sigma-Aldrich	E6909 SIGMA	ECM Gel from Engelbreth-Holm-Swarm murine sarcoma
Getrex	Life Technologies	A1413201	LDEV-Free Reduced Growth Factor Basement Membrane Matrix
HUVEC	Life Technologies	C-003-25P-B	Human Umbilical Vein Endothelial Cells (HUVEC)
RPMI-1640 media	GIBCO	11875-093	RPMI 1640 Medium + L-Glutamine + Phenol Red
FBS Heat inactivated	GIBCO	10082-147	Fetal Bovine Serum, certified, heat inactivated, US origin
3.1 mg/ml Bovine collagen type I	Advanced Biomatrix	5005-B	Bovine Collagen Solution, Type I, 3 mg/ml, 100 ml
Precision XS	BIOTEK	PRC3841	Robotic pipettor system