

Materials List for:

# Automated Quantification and Analysis of Cell Counting Procedures Using ImageJ Plugins

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## Materials

Name	Company	Catalog Number	Comments
HyClone Classical Liquid Media: RPMI 1640 - With L-Glutamine	Fisher Scientific	SH3002702	Cell culturing media
Fetal bovine serum (FBS)	GIBCO BRL	P00015	Media supplement
HTR8/SVneo trophoblast cell line	Cells were obtained from Dr. Charles Graham (Queen's University, Kingston, Canada)		Software is designed to work with any cell line.
Trypsin	GIBCO BRL	27250-018	Prepared as 0.20% (w/v) in 10 µM EDTA 1x PBS
Accutase	Innovative Cell Technologies	AT104	
10 cm cell culture plates	SARSTEDT	833902	Any tissue culture treated plates will be suitable
Transwell Polyester Membrane Inserts - 8.0 µm Pore size	Costar 3422 ordered from Fisher Scientific	7200150	For 24-well plates; Pore size: 8.0 µm; 6.5 mm diameter; 0.33 cm <sup>2</sup> growth area
HARLECO Hematology Stains and Reagents, EMD Millipore - Solutions 1, 2 & 3	EMD Millipore and ordered from VWR	65044A, B, & C	Hemacolor stain set consists of three 500 ml (16.9 oz.) poly bottles & includes a methanol fixative (Solution 1), an eosin or acid stain (Solution 2), and a methylene blue or basic stain (Solution 3)
Cotton Tipped Applicator	Puritan Medical	806-WC	
Single-edge industrial razor blades	VWR	55411 - 055	Thickness: 0.30 mm (0.012")
Microscope Slides - Precleaned/ Plain	Fisher Scientific	12550A3	Dimensions: 25 mm x 75 mm x 1.0 mm
Fisherbrand Cover Glasses - Rectangles no. 1	Fisher Scientific	12-545E	Thickness: 0.13 to 0.17 mm; Size: 50 mm x 22 mm
Fisher Chemical Permout Mounting Medium	Fisher Scientific	SP15-500	
Leica Stereo dissecting microscope	Leica Microsystems		The microscope is equipped with Leica microscope camera Model MC170 HD & camera software is Leica App. Suite (LAS E2) Version 3.1.1 [Build: 490]. Microscope parts: LED3000 Spot Light Illumination Model: MEB126, Leica M80 Optic Carrier Model M80, Objective achromat 1.0X, WD=90 mm Model: MOB306 & Objective achromat 0.32X, WD=303 mm Model: MOB315, Video Objective 0.5X Model: MTU-293
Hemocytometer	Assistant Germany		0.100 mm Depth - 0.0025 mm <sup>2</sup>

Olympus inverted light microscope	Olympus Corporation	CKX41SF	The microscope is equipped with Lumenera Infinity 1-2 2.0 Megapixel CMOS Color Camera & camera software is Infinity analyze Version 6.5.2
Laminar flow cabinet 1300 Series A2	Thermo Scientific	Model: 1375	Any laminar flow cabinet for cell culture work will be suitable
Cell culture incubator	Thermo Scientific	Model: 370	Any cell culture incubator will be suitable - Cells were cultured under humidified environment, 5% CO <sub>2</sub> , 37 °C
ImageJ	NIH	Version 1.50e	Minimum version required
Java Runtime Environment	Oracle	Version 1.8.0_66	Minimum version required