

Materials List for:

Cellular Redox Profiling Using High-content Microscopy

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Materials

Name	Company	Catalog Number	Comments
Reagents			
Tetramethylrhodamine, Methyl Ester, Perchlorate (TMRM)	ThermoFisher Scientific	T668	
CM-H2DCFDA (General Oxidative Stress Indicator)	ThermoFisher Scientific	C6827	
Dimethyl sulfoxide	Sigma)Aldrich	D8418	
MatriPlate 96-Well Glass Bottom MicroWell Plate 630 µL-Black 0.17 mm Low Glass Lidded	Brooks life science systems	MGB096-1-2-LG-L	
HBSS w/o Phenol Red 500 mL	Lonza	BE10-527F	
DMEM high glucose with L-glutamine	Lonza	BE12-604F	
Phosphate Bufered Saline (PBS) w/o Ca and Mg	Lonza	BE17-516F	
HEPES 1 M 500 mL	Lonza	17-737F	
Trypsin-Versene (EDTA) Solution	Lonza	BE17-161E	
Cy3 AffiniPure F(ab') ₂ Fragment Donkey Anti-Rabbit IgG (H+L)	Jackson	711-166-152	Antibody used for acquiring flat-field image
Alexa Fluor 488 AffiniPure F(ab') ₂ Fragment Donkey Anti-Rabbit IgG (H+L)	Jackson	711-546-152	Antibody used for acquiring flat-field image
Name	Company	Catalog Number	Comments
Equipment			
Nikon Ti eclipse widefield microscope	Nikon		
Perfect Focus System (PFS)	Nikon		hardware-based autofocus system
CFI Plan Apo Lambda 20X objective	Nikon		
Name	Company	Catalog Number	Comments
Software			
NIS Elelements Advanced Research 4.5 with JOBS module	Nikon		This software is used to steer the microscope and program/perform the automatic image acquisition prototocol
ImageJ (FIJI) Version 2.0.0-rc-43/1.50g			
RStudio Version 1.0.44	Rstudio		
R version 3.3.2			