

Materials List for

# Fluorescence-Based Quantification of Mitochondrial Membrane Potential and Superoxide Levels using Live Imaging in HeLa Cells

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## URL

jove.com/video/65304

## Materials

Name	Company	Catalog Number	Comments
<b>Chemicals, Peptides, and Recombinant Proteins</b>			
CCCP (carbonyl cyanide m-chlorophenyl hydrazone)	Sigma-Aldrich	C2759	
DMEM (1x) with 4.5 g/L glucose	Gibco	11-965-084	
DMSO, Anhydrous	ThermoFisher Scientific	D12345	
Fetal Bovine Serum	Hyclone	SH3007103	
FuGENE 6 (Transfection Reagent)	Promega	E2691	
GlutaMAX 100x (L-Glutamine Solution)	Gibco	35-050-061	
Hoescht 33342	ThermoFisher Scientific	62249	
MitoSOX Red	ThermoFisher Scientific	M36008	
MitoTracker Deep Red	ThermoFisher Scientific	M7514	
Opti-MEM (Reduced Serum media)	ThermoFisher scientific	31985070	
Tetramethylrhodamine, Ethyl Ester, Perchlorate (TMRE)	ThermoFisher Scientific	T669	
<b>Experimental models: Organisms/ Strains</b>			
HeLa-M ( <i>Homo sapiens</i> )	A. Peden (Cambridge Institute for Medical Research)	N/A	
<b>Recombinant DNA</b>			
EYFP Empty Vector	N/A	N/A	
YFP-Parkin T240R	This Paper	Generated by site-directed mutagenesis from YFP-Parkin	
YFP-Parkin WT	Addgene; PMID:19029340	RRID:Addgene_23955	
<b>Software and Algorithms</b>			
Adobe Illustrator	Adobe Inc.	<a href="https://www.adobe.com/products/illustrator">https://www.adobe.com/products/illustrator</a>	(Schindelin, 2012)

Excel (Spreadsheet Software)	Microsoft Office	<a href="https://www.microsoft.com/en-us/microsoft-365/excel">https://www.microsoft.com/en-us/microsoft-365/excel</a>	
ImageJ		<a href="https://imagej.net/software/fiji/">https://imagej.net/software/fiji/</a>	
Leica Application Suite (LAS X)	Leica	<a href="https://www.leica-microsystems.com/products/microscope-software/p/leica-las-x-ls/">https://www.leica-microsystems.com/products/microscope-software/p/leica-las-x-ls/</a>	
Microsoft Excel	Microsoft Office	<a href="https://www.microsoft.com/excel">https://www.microsoft.com/excel</a>	
Prism9 (Statistical Analysis Software)	GraphPad Software	<a href="https://www.graphpad.com">https://www.graphpad.com</a>	
<b>Other</b>			
35 mm Dish, No. 1.5 Coverslip, 20 mm Glass Diameter, Uncoated	MatTek	P35G-1.5-20-C	
Cage Incubator (Environmental Chamber)	Okolab	<a href="https://www.oko-lab.com/cage-incubator">https://www.oko-lab.com/cage-incubator</a>	
DMiL Inverted Microscope	Leica	N/A	
LIGHTNING Deconvolution Software	Leica	N/A	
STELLARIS 8 confocal microscope	Leica	N/A	