

Product Specifications

JC-10 in DMSO



Orange and Green Fluorescent indicator allows for ratiometric analysis of mitochondrial membrane potential, where a shift from orange to green fluorescence is indicative of compromised mitochondria. Formulated in DMSO for convenient addition to dye-loading solutions.

Available in these sizes:	
5110*	50 μL x 5

^{*}Product must be shipped frozen

Description	
CAS number	5563-28-0 (JC-10)
PubChem CID	171361437 (JC-10)
Molecular Weight	583 g/mol
Concentration	3.5 mM in DMSO
Storage	-20°C
Appearance	Clear orange solution (thawed)
Container	0.5 mL polypropylene cryogenic vial

CI	IΘ
N	
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JC-10 Purity	HPLC*
Minimum Purity	≥ 98.0 %

^{*}Determined by 3rd Party Analysis

Solution Concentration	BioTek Cytation 5 Cell Imaging Multi-mode Reader
Solvent	DMS0
Absorbance @ 460 nm	2.86 ± 0.08

Fluorescence Spectrum	
Healthy Cells	Orange Fluorescence
Excitation max	540 nm
Emission max	590 nm
Injured/Dead Cells	Green Shifted Fluorescence
Excitation max	490 nm
Emission max	525 nm

Cell Assay	BioTek Cytation 5 Cell Imaging Multi-mode Reader
Solvent	PBS, MitoVolt Dye-Loading Solution
Signal to Background Ratio	To Pass Test
Imaging Analysis	Observed fluorescence intracellular with minimal extracellular fluorescence

Note: to maintain the activity of the JC-10 indicator, the number of freeze-thaw cycles that the solution is subjected to should be kept to a minimum.

Also check out ION VITALS MitoVolt Kit (Catalog # 5100) which contains JC-10 in DMSO along with Dye-Loading and Masking Solutions specifically formulated for use with JC-10 for performing mitochondrial membrane potential assays.

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