Datasheet

Version: 4.0.0 Revision date: 21 May 2025



JC1 Mitochondrial Membrane Potential Assay Kit

Catalogue No.:abx090685

JC1 Mitochondrial Membrane Potential Assay Kit contains tetraethylbenzimidazolylcarbocyanine iodide (JC1), a cationic dye that accumulates in polarised mitochondria. At low concentrations (due to low mitochondrial membrane potential) JC1 is predominantly a monomer that emits green fluorescence with an emission wavelength of 530 ± 15 nm. At high concentrations (due to high mitochondrial membrane potential) the dye aggregates, emitting a red-orange colour (emission wavelength of 590 ± 17.5 nm). Therefore a decrease in the aggregate fluorescent count is indicative of depolarisation whereas an increase is indicative of hyperpolarisation. The ratio of red to green fluorescence of JC1 is dependent only on membrane potential, and not influenced by mitochondrial size, shape, or density.

Target: JC1 Mitochondrial Membrane Potential

Excitation/Emission: JC-1 Monomer: 514/529

JC-1 Polymer: 585/590

Storage: Shipped at 4 °C. Upon receipt, store the kit according to the storage instruction in the kit's manual.

Validity: The validity for this kit is 12 months.

Detection Method: Fluorometric

Note: THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC

OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.