

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.

Storage: Store the JC1 (200X) component at -20 °C in the dark. Store the Distilled Water and JC1 Staining Buffer (5X) components at 4 °C for short-term storage, or at -20 °C for long-term storage. Store the CCCP component at -20 °C.

Note: This product is for research use only.