
Product Datasheet

Mitochondrial Membrane Potential Assay Kit (JC-1) (orb1147886)

Description**Biorbyt Mitochondrial Membrane**

simple method for distinguishin...

Storage

Refer to list of materials supplied for storage conditions of individual components. Stable for at least 12 months at recommended temperature from date of shipment.

Note

For research use only

Application notes

Biorbyt Mitochondrial Membrane Potential Assay Kit (JC-1) provides a simple method for distinguishing between healthy and apoptotic cells by detecting the changes in the mitochondrial transmembrane potential, based on a carbocyanine dye, JC-1. In healthy cells, this dye accumulates and aggregates in the mitochondria, where it forms bright red fluorescent agglomerates. Any event that dissipates the mitochondrial membrane potential prevents the accumulation of the JC-1 dye in the mitochondria and thus, the dye remains in the cytoplasm in its monomer form, leading to a shift from red (agglomerated JC-1, Ex/Em = 585/590 nm) to green fluorescence (JC-1 monomers, Ex/Em = 510/527 nm). JC-1 can be used as an indicator of mitochondrial potential in a variety of cell types, including myocytes and neurons, as well as in intact tissues and isolated mitochondria. This kit contains CCCP that causes an uncoupling of the proton gradient, which established during the normal activity of electron carriers in the electron transport chain, and thus, dissipates the mitochondrial electrochemical potential and may be used as a control that prevents JC-1 aggregation.

Hazard Information

The product listed herein is for research use only and is not intended for use in human or clinical diagnosis. Suggested applications of our products are not

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