CREATIVE BIOMART®
Assay Kit

JC-1 Mitochondrial Membrane Potential Assay Kit

Product Information

Cat.No. Kit-0487

Product Overview

JC-1 Mitochondrial Membrane Potential Assay Kit is a fluorescence-based method for tracing the behavior of mitochondria.

Description

ΔΨM is an important parameter of mitochondrial function and has been used as an indicator of cell health. Variation of ΔΨM have been previously studied using cationic dyes such as rhodamine-123 (Rh123) and DiOC6. More recently, a cytofluorimetric, lipophilic cationic dye, 5,5",6,6"-tetrachloro-1,1",3,3"-tetraethylbenzimi -dazolylcarbocyanine iodide (JC-1), has been developed. JC-1 has advantages over other cationic dyes in that it enters the mitochondria and changes its fluorescent properties based on the aggregation of the probe. In healthy cells with high ΔΨM, JC-1 forms complexes known as J-aggregates with intense red fluorescence. However, in cells with low ΔΨM, JC-1 remains in the monomeric form, which exhibits green fluorescence. The higher the ratio of red to green fluorescence, the higher the polarization of the mitochondrial membrane.

Usage

For research use only (RUO)

Storage

JC-1 Reagent -20°CCell-Based Assay Buffer Tablet Room Temperature

Kit Components

JC-1 Reagent 500 μLCell-Based Assay Buffer Tablet 3 tablets

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