

910-3007 Solution 7 - JC-1**1 ml**

Contents	Solution 7 - JC-1 (1 ml). The solution contains 5,5',6,6'-tetrachloro-1,1',3,3'-tetraethylbenzimidazolyl-carbocyanine iodide (JC-1; 200 µg/ml ~ 0.30 mM ~ 0.02%) in dimethyl sulfoxide (DMSO). The EINECS no. for DMSO is 200-664-3.
Application	Solution 7 - JC-1 is used to measure the mitochondrial transmembrane potential ($\Delta\Psi_m$). Disruption of the $\Delta\Psi_m$ is often associated with early stages of apoptosis.
Principle	Solution 7 - JC-1 displays potential-dependent accumulation in the mitochondria and provides a simple, fluorescent-based method for distinguishing between healthy and apoptotic cells. In healthy cells, the negative charge established by the intact mitochondrial membrane potential facilitates the accumulation of JC-1 in the mitochondrial matrix. At high concentrations, JC-1 forms aggregates and becomes red fluorescent. In apoptotic cells, the mitochondrial potential collapses, and JC-1 localizes to the cytosol in its monomeric green-fluorescent form. Mitochondrial depolarization is revealed as a decrease in the red/green fluorescence ratio.
Use	Thaw and mix before use! The solution is for research use only (RUO) and is not for diagnostic or therapeutic uses.
Storage	Store at < 5°C. Protect the solution against moisture and light.
Stability	Unopened microtubes can be stored until the expiry date indicated on the microtube. The solution is produced 15 months prior to the expiry date. We recommend using the solution no later than the expiry date or one (1) month after opening the microtube, whichever comes first.
Safety information	DMSO is an irritating organic compound with long-term effects. DMSO's hazard classification is: Xi. Risk-phrases: R36/37/38 (Irritating to eyes, respiratory system, and skin). Safety-phrases: S26 (In case of contact with eyes, rinse immediately with plenty of water and seek medical advice). S37 (Wear suitable gloves). Please also refer to the safety data sheet (SDS) regarding safety information.
Disposal	After use, dispose of the bottle following national or local laws and regulations, according to the nature of its contents.