

910-3007 Solution 7 - JC-1

1 mL

Contents	Microtube with 1 mL <i>Solution 7 - JC-1</i> .
	The solution contains 5,5',6,6'-tetrachloro-1,1',3,3'-tetraethylbenzimidazolyl-
	carbocyanine iodide (JC-1) (200 μ g/mL~ 0.30 mM ~ 0.02%) in DMSO.
	EINECS no. for DMSO is 200-664-3.
Application	Solution 7 - JC-1 can be used for measurement of 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.
Usage	Thaw and mix before use!
	The solution is for research and development purposes only and is not for diagnostic or
	therapeutic use.
Storage	Store at < 5°C
	Protect the solution against moisture and light.
Stability	For unopened microtubes, the expiry date is shown on the microtube and on the plastic container. The solution is produced 15 months before the expiry date.
	The solution expires 1 month after opening the microtube.
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Safety Information	Dimethyl Sulfoxide (DMSO) is an irritating organic compound with long term effects.
	DMSO has the hazard classification: 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 MSDS regarding safety information.
Disposal of Waste	After use, the microtube should be disposed of according to national or local laws and regulations regarding the nature of the mixture it contains.