JC-1 (ultra pure)

Mitochondria dye

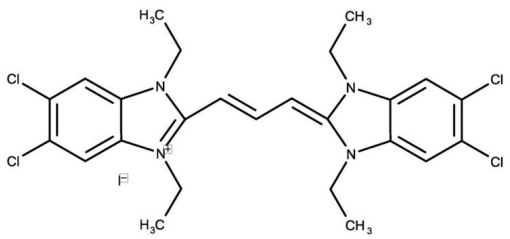
JC-1 is widely used for determining mitochondrial membrane potential by flow cytometry, fluorescence microscopy and in microplate-based fluorescent assays. JC-1 accumulates in mitochondria, selectively generating an orange J-aggregate emission profile (590 nm) in healthy cells. However, upon cell injury, as membrane potential decreases, JC-1 monomers are generated, resulting in a shift to green emission (529 nm). The principal advantage of JC-1 relative to other commonly employed fluorescent probes of mitochondrial membrane potential is that it allows for both qualitative visualization, considering the shift from orange to green fluorescence emission, and quantitative detection, considering the fluorescence intensity ratio. Wavelength Maxima: Excitation 515nm, Emission 529nm

Citations: 39 View Online »

Ordering Information Order Online »

ENZ-52304	5mg

Manuals, SDS & CofA View Online »


H3C
CH3
Cl
N
N
Cl
Cl
N+
N
Cl
I-
H3C
CH3

Handling & Storage

Use/Stability	Stable for at least one year after receipt when stored as recommended.
Handling	Protect from light. Keep cool and dry.
Long Term Storage	-20°C
Shipping	Ambient Temperature

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	5,5',6,6'-Tetrachloro-1,1',3,3'-tetraethylbenzimidazolylcarbocyanine iodide
CAS	3520-43-2
Formula	$C_{25}H_{27}Cl_4IN_4$
MW	652.2
Purity	≥95% (HPLC)
Solubility	Soluble in DMSO.
Technical Info / Product Notes	This product is a member of the CELLESTIAL® product line, reagents and assay kits comprising fluorescent molecular probes that have been extensively benchmarked for live cell analysis applications. CELLESTIAL® reagents and kits are optimal for use in demanding imaging applications, such as confocal microscopy, flow cytometry and HCS, where consistency and reproducibility are required.

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ENZO LIFE SCIENCES, INC.
Phone: 800.942.0430
info-usa@enzolifesciences.com

European Sales Office
ENZO LIFE SCIENCES (ELS) AG
Phone: +41 61 926 8989
info-eu@enzolifesciences.com

Belgium, The Netherlands & Luxembourg
Phone: +32 3 466 0420
info-be@enzolifesciences.com

France
Phone: +33 472 440 655
info-fr@enzolifesciences.com

Germany
Phone: +49 7621 5500 526
info-de@enzolifesciences.com

UK & Ireland
Phone (UK customers): 0845 601 1488
Phone: +44 1392 825900
info-uk@enzolifesciences.com