

JC-1, Mitochondrial membrane potential probe

Catalog	Unit
TBI1634 - 1MG	1 mg
TBI1634 - 5MG	5 mg

Product Details

Formal Name: 5,5,6,6-Tetrachloro-1,1,3,3-tetraethylbenzimidazolylcarbocyanine iodide

Molecular Formula: C₂₅H₂₇Cl₄IN₄

Formula Weight: 652.23

CAS Number: 3520-43-2

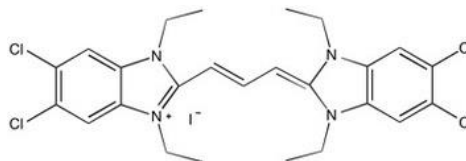
Purity: >98%

Formulation: Powder

Solubility: DMSO (up to 15 mg/ml) or Water (up to 50 mg/ml)

Storage: -20°C / protect from light

Stability: ≥ 2 years.



Applications

Mitochondrial membrane potential probe

Functions

JC-1 (CAS 3520-43-2) is a dual emission, potential-sensitive, carbocyanine probe which can be used to measure mitochondrial membrane potential. When excited at 490 nm the monomer exhibits an emission maximum at 527 nm and J-aggregates at 590 nm. JC-1 changes color reversibly from green to red with increasing mitochondrial membrane potential. May be used for isolation of live cells expressing high multidrug resistance transport activity. A widely used probe for determination of mitochondrial membrane potential.

Application Procedures

First dissolved in DMSO (up to 15 mg/ml), then diluted to aqueous buffer. Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or distilled water may be stored at 4°C for up to 1 year. DO NOT FREEZE/THAW SOLUTIONS. Sterilize solutions only by filtration, not by autoclaving.

Relative Products

TBI1170	Mitomycin C
TBI1345	E64, Cysteine protease inhibitor
TBI1347	E64d, Cysteine protease inhibitor
TBI2064	Chromomycin A3
TBI2069	Cytochalasin B
TBI2794	5-EDU, DNA Click labeling probe
TBI2071	Cytochalasin D
TBI1286	Bestatin, Aminopeptidase inhibitor
TBI2140	Gemcitabine
TBI2058	Aphidicolin, DNA polymerase Inhibitor

For research use only.