Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

JC-1

Catalog No: tcsc1148

Available Sizes

Size: 2mg

Size: 5mg

Size: 10mg

Size: 50mg

Specifications

CAS No:
3520-43-2

Formula:
$C_{25}H_{27}Cl_4IN_4$

Pathway:
Others

Target:
Others

Purity / Grade:
>98%

Solubility:
H2O :

Alternative Names:
CBIC2

Observed Molecular Weight:
652.23

Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Product Description

JC-1 is a fluorescent lipophilic carbocyanine dye, which can be used to measure mitochondrial membrane potential.

In Vitro: JC-1 (2.5 μM) exposed to murine L1210 lymphoblasts, can be detected the presence of both cytoplasmic JC-1 monomer and mitochondrial J-aggregates in these cells. JC-1 fluorescence is usually excited by the 488 nm laser wavelength common in flow cytometers[1]. Fluorescent labeling of mitochondria with either JC-1 (1 μg/mL, 15 min), reveals that are distributed irregularly, resulting in regions of high and low mitochondrial content within astrocytes[2]. JC-1 has been shown to interact with α-synuclein at the acidic C-terminal region with a K_d of 2.6 μM. JC-1 itself does not accelerate the protein aggregation of α-synuclein in the absence of iron, insted, it decelerates the aggregation process by extending the lag phase approx[3]. JC-1 is avidly accumulated in sensitive K562 cells where it displays both a green cytoplasmic and red mitochondrial fluorescence. JC-1 is poorly accumulated in resistant K562 cells, which displays only a slight green fluorescence[4].