

Product Name: Propidium iodide

Catalog No.: 5135

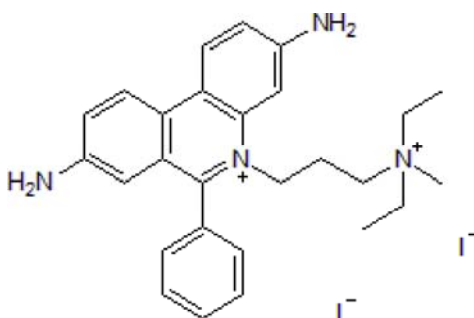
Batch No.: 2

CAS Number: 25535-16-4

IUPAC Name: 3,8-Diamino-5-[3-(diethylmethylammonio)propyl]-6-phenylphenanthridinium diiodide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₂₇ H ₃₄ I ₂ N ₄ ·½H ₂ O
Batch Molecular Weight:	677.4
Physical Appearance:	Red solid
Solubility:	water to 5 mM with sonication
Storage:	Store at -20°C
Batch Molecular Structure:	



2. ANALYTICAL DATA

HPLC:	Shows 96.6% purity at 292 nm
¹H NMR:	Consistent with structure
Mass Spectrum:	Consistent with structure
UV Spectrum:	Consistent with structure
λ_{max}:	495 nm (0.01M PBS pH 7.4)
λ_{em}:	635 nm (0.01M PBS pH 7.4)

Microanalysis:	Carbon Hydrogen Nitrogen		
Theoretical	47.87	5.21	8.27
Found	47.13	4.98	8.12

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Propidium iodide is a red-fluorescent DNA stain. Membrane impermeant to live cells. Propidium iodide staining differentiates between live and dead cells in cell populations.

Physical and Chemical Properties:

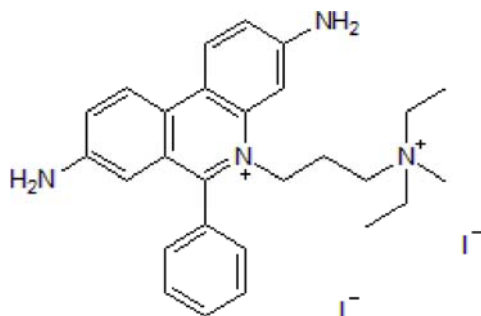
Batch Molecular Formula: C₂₇H₃₄I₂N₄·½H₂O

Batch Molecular Weight: 677.4

Physical Appearance: Red solid

Minimum Purity: ≥95%

Batch Molecular Structure:



Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

water to 5 mM with sonication

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Sonnemann *et al* (2014) p53-dependent and p53-independent anticancer effects of different histone deacetylase inhibitors. *Br.J.Cancer* **110** 656. PMID: 24281001.

Jeong *et al* (2013) SIRT4 protein suppresses tumor formation in genetic models of Myc-induced B cell lymphoma. *J.Biol.Chem.* **289** 4135. PMID: 24368766.

Yun *et al* (2013) Serine hydrolase inhibitors block necrotic cell death by preventing calcium overload of the mitochondria and permeability transition pore formation. *J.Biol.Chem.* **289** 1491. PMID: 24297180.

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