

Product Name: Dihydroethidium

Catalog No.: 7642

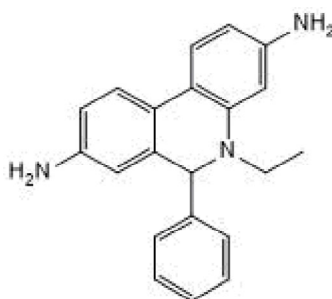
Batch No.: 1

CAS Number: 104821-25-2

IUPAC Name: 5-Ethyl-5,6-dihydro-6-phenyl-3,8-phenanthridinediamine

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₂₁ H ₂₁ N ₃
Batch Molecular Weight:	315.41
Physical Appearance:	Brown solid
Solubility:	DMSO to 10 mM
Storage:	Store at -20°C
Batch Molecular Structure:	



2. ANALYTICAL DATA

HPLC:	Shows 99.0% purity
¹ H NMR:	Consistent with structure
Mass Spectrum:	Consistent with structure
UV Spectrum:	Consistent with structure
λ _{max} :	355 nm (Acetonitrile)

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

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CAS Number: 104821-25-2

IUPAC Name: 5-Ethyl-5,6-dihydro-6-phenyl-3,8-phenanthridinediamine

Description:

Dihydroethidium is a fluorescent reactive oxygen species indicator. Cell permeable and suitable for use in live cells. Can be used with Mito-HE (Cat. No. 7641) to measure superoxide in living cells. Excitation/emission maxima λ 350/595 nm

Physical and Chemical Properties:

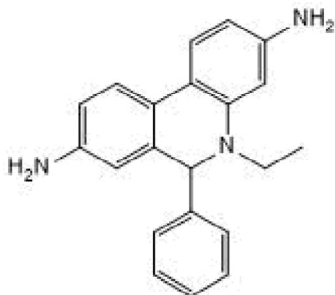
Batch Molecular Formula: C₂₁H₂₁N₃

Batch Molecular Weight: 315.41

Physical Appearance: Brown solid

Minimum Purity: ≥95%

Batch Molecular Structure:



Storage: Store at -20°C. This product is packaged under an inert atmosphere.

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:

DMSO to 10 mM

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. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

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:

Peterson *et al* (2002) Hydroethidine detection of superoxide production during the lithium-pilocarpine model of status epilepticus. *Epilepsy Res.* **49** 226. PMID: 12076844.

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