

Product Information

Dihydroethidium (Hydroethidine)

Catalog Number: D1004

Product Size: 5 mg

Parameters

Appearance: White to light brown solid soluble in DMF or DMSO

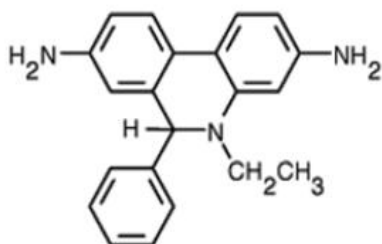
Ex/Em: 355/420 nm

CAS No.: 38483-26-0

Molecular Formula: $C_{21}H_{21}N_3$

Molecular Weight: 315

Molecular Structure:



Storage

Store at -20°C and protect from light. When stored as directed,

product is stable for at least 12 months.

Description

Dihydroethidium (also called hydroethidium) is the chemically reduced form of the commonly used DNA dye ethidium bromide. The probe is useful to detect oxidative activities in viable cells, including respiratory burst in phagocytes. Dihydroethidium itself has blue fluorescence ($\lambda_{\text{Ex}}/\lambda_{\text{Em}}$: 355/420 nm) in cells, while the oxidized form ethidium has red fluorescence ($\lambda_{\text{Ex}}/\lambda_{\text{Em}}$: 518/605 nm) upon DNA intercalation.

Notes

1. For the detection of intracellular superoxide anion (O_2^-), the recommended concentration of dihydroethidium is 1-10 μM .
2. There are quenching problems with fluorescent dyes. Please avoid light to slow down the fluorescence quenching.
3. For your safety and health, please wear lab coats and disposable gloves.

