

Product Information

Ethidium Monoazide Bromide (EMA)

Catalog Number: E4035

Product Size: 5 mg

Parameters

Appearance: Orange solid soluble in ethanol or DMF

Ex (pH3) = 458 nm

$\lambda_{Ex}/\lambda_{Em}$: 510/600 nm (after photocrosslinking to nucleic acid)

CAS No.: 58880-05-0

Molecular Formula: $C_{21}H_{18}BrN_5$

Molecular Weight: 420.31

Storage

Store at -20°C and protect from light. When stored as directed, product is stable for at least 12 months.

Description

Ethidium monoazide bromide is a nucleic acid fluorescent staining reagent with an affinity tag, which is covalently bound to a nucleic acid after photolysis. The dye is used to imprint the DNA binding site of the drug, modify the plasmid DNA, and

determine the phenotype, function, and location of hematopoietic cells in the cell cycle progression. In the presence of living cells, azide ethidium bromide can selectively covalently label dead cells. Since azide ethidium bromide is impervious to living cells, it selectively labels necrotic cell DNA in the presence of dead cells and living cells. After photolysis, covalently labeled dead cell DNA can be analyzed by microscopy and fluorescence. Plate or flow cytometry for observation and analysis. The main advantage of this method is that extensive active bacterial manipulation can be avoided. Azide ethidium bromide has been used to distinguish between dead and live bacteria by 5' nuclease PCR.

Notes

1. The recommended concentration of this product is 10-200 mg/L, and the optimal use concentration is determined by experience.

