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Produktinformation



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Lieferung & Zahlungsart

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Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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Product Information

Ethidium Homodimer I (EthD-I)

Catalog Number

40010: 1 mg solid
40014: 0.5 mL (2 mM in DMSO)

Storage and Handling

The solid is soluble in water or DMSO. Store the solid and the solution at 4°C, desiccated and protected from light. Product is stable for at least 5 years from date of receipt when stored as recommended. Ethidium Homodimer I dye binds to nucleic acids. EthD-I is a known potential mutagen. It should be handled and disposed using universal laboratory safety precautions.

Molecular Information: C₄₆H₅₀Cl₄N₈

CAS number: 61926-22-5

Molecular Weight: 857

Color and Form: Red solid

Solubility: Soluble in water or DMSO

Absorption/Emission: 527/624 nm* (with DNA)

*Ethidium Homodimer I also has a strong UV absorbance peak at 279 nm

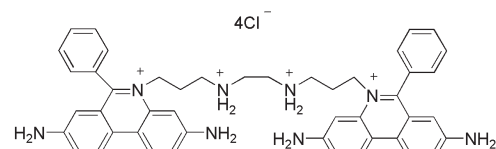


Figure 1. Ethidium Homodimer I (EthD-I)

Product Description

Ethidium Homodimer I is a high affinity fluorescent nucleic acid stain. It binds to both DNA and RNA in a sequence-independent manner and with a >30-fold fluorescence enhancement. The DNA binding of each Ethidium Homodimer I covers four base pairs and is believed to occur by intercalation. Because the dye is highly positively charged, it can not cross cell membranes to stain living cells. The dye is useful for detecting nucleic acids in solution or for selectively staining dead cells with damaged plasma membranes in all cell types, including mammalian cells, bacteria, and yeast.

Biotium offers a high purity grade Ethidium Homodimer I that is not available anywhere else. Ethidium Homodimer I from other suppliers often contain a high amount of inorganic salt (as much as 20%).

References

- Anal. Methods, 12(3), 297(2020);
- PLoS One, 14(5), e0217170(2019);
- Cell Stress Chaperones, 24(6), 1175(2019);
- Biofabrication, 12(1), 015024(2019);
- Polym Chem. 9, 3798, (2018);
- Virology, 522, 244, (2018);
- PLoS One, 11(3), e0150675, (2016);
- Am J Physiol Gastrointest Liver Physiol., 310, G240, (2016);
- Hum Mol Genet., 24, 5154, (2015);
- Regen Med., 10, 153, (2015);
- PLoS One, 9(7), e103525, (2014);
- Dent Mater., 30, e349, (2014);
- Biochem Biophys Res Commun., 423, 542, (2012);
- Cell Death Dis, 3, e301, (2012);
- Chembiochem, 13, 465, (2012);
- Nucleic Acid Res., 23, 2413, (1995);
- Bioorg Med Chem., 3, 701, (1995).

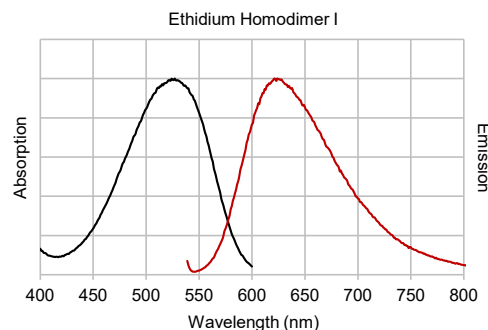


Figure 2. Normalized absorption and emission of Ethidium Homodimer I

Related Products

Catalog number	Product
90082	DMSO, Anhydrous
40050	Ethidium Homodimer III (EthD-III), 1 mg
40017	Propidium Iodide (PI), 1 mg/mL in Water
40101	BactoView™ Live Red
40102	BactoView™ Live Green
30002	Viability/Cytotoxicity Assay Kit for Animal Live & Dead Cells
30066	Apoptotic, Necrotic & Healthy Cells Quantitation Kit Plus
30027	Viability/Cytotoxicity Assay Kit for Bacteria Live and Dead Cells
32001	Bacterial Viability and Gram Stain Kit
32010	Live-or-Dye NucFix™ Red
32002-32009	Live-or-Dye™ Fixable Viability Staining Kits
40069	PMAxx™ Dye for Viability PCR, 20 mM in Water
30068	ViaFluor® 405 SE Cell Proliferation Kit
30086	ViaFluor® 488 SE Cell Proliferation Kit

Please visit our website at www.biotium.com for information on our life science research products, including other dead cell selective stains, viability assays, and other reagents for cell and microbiology research.

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