

Ethidium Homodimer III (EthD-III)

A red fluorescent dead cell stain for bacteria and mammalian cells that is brighter than Ethidium Homodimer I.



Product Description

Ethidium Homodimer III, also known as EthD-III, is a red fluorescent dead cell stain for bacteria and mammalian cells. It is a cell membrane-impermeant nucleic acid dye that stains only dead cells with damaged cell membranes. Ethidium Homodimer III was developed by Biotium as a superior alternative to Ethidium Homodimer I. The absorption and emission spectra are similar, but EthD-III is 45% brighter.

- Dead cell-specific DNA stain
- Can be used in mammalian, yeast, and bacteria cells
- 45% brighter than Ethidium Homodimer I
- Provided as a red solid

Ethidium Homodimer III is membrane impermeant and useful for selectively staining dead cells with damaged plasma membranes. It also is a component of several combination viability assay kits for detecting both live and dead cells in the same population, such as our Viability/Cytotoxicity Assay Kit for Animal Cells (Cat. No 30002) and our Viability/Cytotoxicity Assay Kit for Bacteria (Cat. No. 30002).

We also offer Ethidium Homodimer III, 1 mM solution in DMSO (catalog no. 40051).

EthD-III is dead cell specific in all cell types, including mammalian cells, bacteria and yeast. See our <u>Cellular Stains Table</u> for more information on how our dyes stain various organisms.

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Product attributes

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Probe cellular localization	Nucleus & cytoplasm
Assay type/options	Real-time imaging
Cell permeability	Membrane impermeant
Apoptosis/viability marker	Dead cell stain
Colors	Red
Excitation/Emission	279, 532/625 nm (with DNA)
Storage Conditions	Store at 2 to 8 °C, Protect from light
Molecular weight	~1000