Glowing products for science

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DMAO, 2 mM in DMSO

A membrane-permeable DNA dye, excellent for staining both gram positive and gram negative bacteria. Stained cells can be detected by fluorescence microscopy or flow cytometry.



Product attributes

Probe cellular localization	Nucleus & cytoplasm
Cell permeability	Membrane permeant
For live or fixed cells	For live/intact cells
Detection method/readout	Fluorescence microscopy, Flow cytometry
Excitation/Emission	496/528 nm (with DNA)
Colors	Green
Storage Conditions	Store at room temperature or below, Protect from light

Product Description

DMAO is a membrane-permeable DNA dye, excellent for staining live and dead bacteria. It is able to stain both gram positive and gram negative strains, and stained cells can be detected by fluorescence microscopy or flow cytometry.

- Membrane permeable green DNA stain
- Stains both live and dead bacteria
- Detect by fluorescence microscopy and flow cytometry
- Stable for room temperature storage
- Supplied at 2 mM in DMSO

Unlike the SYBR® dyes, DMAO is extremely stable and can be routinely handled and stored at room temperature without degradation. DMAO will permeate the membrane of live and dead cells to preferentially bind dsDNA with green fluorescence. DMAO staining in live yeast is not nuclear. In live mammalian cells, DMAO shows both nuclear and cytoplasmic staining. We recommend NucSpot® Live or

RedDot™1 dyes for nuclear staining of live mammalian cells.

Find the Right Stain for Your Application

Biotium also offers live-cell specific bacteria stains in other colors and with other beneficial properties. Such as BactoView™ Live bacteria stains in two colors (green & red). BactoView™ Live dyes give the most consistent, bright staining of bacteria of different strains, with minimal difference between live and dead cells. See our Live Cellular Stains Selection Guide and Cellular Stains Table for more information about live-cell specific dyes, including bacteria stains. Our Bacteria Stains Flyer has information on available bacteria-specific dyes for a variety of applications, including Viability PCR.

We also offer DMAO paired together with a dead cell stain (Ethidium Homodimer III, or EthD-III) in our Viability/Cytotoxicity Assay Kit for Bacteria Live and Dead Cells. Biotium developed Ethidium Homodimer III, as a superior alternative to EthD-I. The absorption and emission spectra are similar, but EthD-III is 45% brighter. Biotium also offers other dead-cell stains in other colors and with other beneficial properties such as Live-or-Dye NucFix™ Red which, unlike EthD-I, is a fixable dead-cell stain. See our Dead Cell & Apoptosis Stains Selection Guide and Cellular Stains Table for more information. Learn more about EthD-I and other dead-cell specific stains.

SYBR is a registered trademark of Thermo Fisher Scientific.

References

RSC Advances., 3, 6343, (2013), DOI: 10.1039/C3RA40369F