

CytoLiner™ Fixed Cell Membrane Stains

Novel lipophilic fluorescent dyes for selective staining of the plasma membrane in formaldehyde-fixed cells. Available in 6 colors, from blue to near-IR.



Product attributes

Probe cellular localization	Membrane/cell surface
For live or fixed cells	For fixed cells
Assay type/options	Endpoint assay
Fixation options	Fix before staining (formaldehyde), Permeabilize before staining
Colors	Blue, Green, Red, Far-red, Near-infrared

Product Description

CytoLiner™ Fixed Cell Membrane Dyes are novel lipophilic fluorescent dyes developed specifically for selective plasma membrane staining in fixed cells for microscopy. The dyes are engineered for robust and consistent staining of formaldehyde-fixed cells, and are suitable for downstream immunofluorescence staining protocols.

Note: Staining with CytoLiner™ Dyes is not compatible with cells fixed using solvents like methanol or acetone, or with paraffin-embedded samples, because these treatments will remove the lipids from cells, which are required for CytoLiner™ staining. For co-staining with antibodies, we recommend staining with CytoLiner™ Dye first, then blocking with [2% fish gelatin](#) in PBS, followed by antibody incubation in the same buffer. Blocking with BSA or serum is not recommended.

Novel Membrane Dyes Designed for Fixed Cells

While classic lipophilic membrane dyes like Dil can be used to stain formaldehyde-fixed cells, staining can be highly variable due to the poor solubility of the dyes. CytoLiner™ Dyes are a new generation of membrane dyes uniquely engineered to permit selective staining of the plasma membrane in fixed and mildly permeabilized cells. CytoLiner™ staining is compatible with formaldehyde fixation and mild detergent permeabilization before staining. Staining can tolerate blocking agents used during immunofluorescence staining protocols, although [fish gelatin](#) is recommended for best results, allowing subsequent staining with antibodies and other probes. The dyes also are compatible with poly-L-lysine coated cultureware and Transwell® permeable filter supports. CytoLiner™ Dyes are available in a selection of 6 colors from blue to near-IR.

Superior Staining Performance Over Classic Membrane Dyes

Suitable for Co-Staining with Antibodies and Other Probes

Find the Right Stain for Your Application

CytoLiner™ Dyes are part of Biotium's family of unique and innovative cell membrane stains designed for specific applications. For workflows requiring staining live cells before fixation, we recommend our [CellBrite® Fix Membrane Stains](#) or [MemBrite® Fix Cell Surface Staining Kits](#). Biotium also offers CF® Dye conjugated lectins, including [Concanavalin A \(Con A\)](#) and [Wheat Germ Agglutinin \(WGA\)](#), for visualizing cell surfaces in live or fixed cells. For longer term monitoring of cell surfaces in live cells, we recommend [CellBrite® Steady Dyes](#). To find the right stain for your application, see our [Membrane & Cell Surface Stains Comparison](#), or download our [Membrane & Surface Stains Brochure](#).

Watch our video where Technical Applications Scientist II, Jacqueline Steenhuis PhD answers your top questions about Biotium's various membrane stains for fluorescence microscopy.

For additional support or product recommendations, contact us at techsupport@biotium.com.

CytoLiner™ Fixed Cell Membrane Stains

Product	Ex/Em	Detection Channels	Size	Catalog Number
CytoLiner™ 410/450 1000 Labelings	406/446 nm 30131	DAPI/Pacific Blue™	250 Labelings	30131-T
CytoLiner™ 495/510 1000 Labelings	492/510 nm 30132	FITC	250 Labelings	30132-T
CytoLiner™ 570/590 1000 Labelings	573/592 nm 30133	Cy@3/TRITC	250 Labelings	30133-T
CytoLiner™ 650/675 1000 Labelings	647/674 nm 30134	Cy@5	250 Labelings	30134-T
CytoLiner™ 680/710 1000 Labelings	682/707 nm 30135	Cy@5.5	250 Labelings	30135-T
CytoLiner™ 785/815 1000 Labelings	787/819 nm 30140	Alexa Fluor® 790	250 Labelings	30140-T