

GlycoLiner™ Cell Surface Glycoprotein Labeling Kits

Unique kits designed for rapid, simple, and gentle covalent labeling of glycoproteins on the surface of live cells with fluorescent dyes or biotin.



Product attributes

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

Product Description

GlycoLiner™ Kits are designed for labeling glycoproteins on the surface of live cells with fluorescent dyes or biotin. The reaction is rapid, simple, and gentle, and produces highly selective, covalent labeling of the cell surface that is compatible with subsequent fixation, permeabilization, and immunofluorescence staining or cell lysis.

Obtain Robust Cell Surface Labeling in Live Cells with GlycoLiner™

GlycoLiner™ Kits were designed as a superior alternative for labeling cell surfaces in live cultures. Unlike other covalent cell surface labels which can have significant cytoplasmic background, GlycoLiner™ staining of dead cell cytoplasm is less intense, providing easier imaging of cell surfaces.

The labeling procedure uses aminoxy chemistry to label live cells after a mild oxidation treatment to convert glycoprotein sugars into carbonyl groups (aldehydes and ketones). The reactive GlycoLiner™ Dye or Biotin then reacts with the carbonyl groups to form a stable covalent oxime bond. GlycoLiner™ technology uses novel self-catalyzing aminoxy groups that are highly reactive at neutral pH without the need to add a catalyst. This is in contrast to glycoprotein labeling using conventional aminoxy labels, which is not only slow but also requires the use of high concentrations of reactive dye and catalyst in acidic buffer. The GlycoLiner™ labeling procedure is complete in about 20 minutes, and can be performed at room temperature or 4 °C.

Bright Cell Surface Staining Available in 5 Colors + Biotin

Suitable for Co-Staining with Antibodies and Other Probes

Find the Right Stain for Your Application

GlycoLiner™ Kits are part of Biotium's family of unique and innovative cell membrane stains designed for specific applications. For staining cells already fixed with formaldehyde, we recommend our [CytoLiner™ Fixed Cell Membrane Stains](#). For workflows requiring staining live cells just before fixation, Biotium also offers [CellBrite® Fix Membrane Stains](#) and [MemBrite® Fix Cell Surface Staining Kits](#). CF® Dye conjugated lectins are available, 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](#).

GlycoLiner™ Cell Surface Glycoprotein Labeling Kits

Dye	Abs/Em (nm)	Detection channel	Size	Catalog No.
GlycoLiner™ 400/420	400/419	DAPI, Alexa Fluor® 405	100 labelings	30144-T
500 labelings	30144			
GlycoLiner™ 490/515	492/516	FITC, Alexa Fluor® 488	100 labelings	30145-T
500 labelings	30145			
GlycoLiner™ 550/570	550/570	Cy®3, PE	100 labelings	30151-T
500 labelings	30151			
GlycoLiner™ 650/670	652/673	Alexa Fluor® 647	100 labelings	30146-T
500 labelings	30146			
GlycoLiner™ 680/710	680/706	Alexa Fluor® 680	100 labelings	30147-T
500 labelings	30147			
GlycoLiner™ Biotin	N/A	N/A	100 labelings	30143-T
500 labelings	30143			

ALEXA FLUOR is a registered trademark of Thermo Fisher Scientific; CY DYE is a registered trademark of Cytiva.