AF 568 WGAV

Article number: KF-YG0736

specification: 1mg/5*1mg

Product description

Wheat germ agglutinin (WGA) is a carbohydrate-binding agglutinin with a high affinity for sialic acid and the N-acetylglucosamine moiety of glycoproteins. Therefore, WGA conjugates label yeast bud scars as well as the cell membranes of Gram-positive bacteria and mammalian cells.

- Stains yeast bud scars and cell membranes of Gram-positive bacteria and mammalian cells or tissues
- Suitable for Western Blot, ELISA, immunohistochemistry, and other standard immunoassay applications
- Retrograde or anterograde neuronal tracers
- Withstands fixation and permeabilization
- 14 CF® dyes available, from UV to near-infrared, biotinylated or HRP-conjugated
- Superior CF® dyes are bright, photostable, and water-soluble

WGA is commonly used to label glycoproteins for plasma membrane imaging in live or

fixed cells, tissue section staining, or protein blotting. WGA can be used as a Gram stain for fluorescent labeling of Gram-positive bacteria, but cannot label Gram-negative bacteria. WGA also binds to bud scars on budding yeast (such as Saccharomyces cerevisiae).

Find the right dye for your application

WGA and other lectins are carbohydrate-binding proteins that recognize specific sugar groups on glycoproteins. The presence and distribution of these targets vary by cell type and tissue. Therefore, other cell surface stains or other lectin conjugates, such as Concanavalin A (Con A) conjugates and Peanut Agglutinin (PNA) conjugates, may provide better surface staining and may be more suitable for your cell type. Lectin conjugates can be used to selectively stain the cell surface of live cells, and can withstand fixation and permeabilization. When cells are fixed and permeabilized before staining, fluorescent lectins will stain the cell surface and organelles in the secretory pathway. Lectins may be toxic or irritating to live cells, depending on the cell type. To find the stain that is right for your application, please refer to our membrane and cell surface stain comparison. Please refer to our cell staining table for more information on how our dyes stain various organisms.

Premium CF® dyes

Biotium's next-generation CF® dyes are designed to be highly water-soluble and offer advantages in brightness and photostability compared to Alexa Fluor®, DyLight®, and other fluorescent dyes. Learn more about CF® dyes. Note: Conjugates of blue fluorescent dyes such as CF®350, CF®405S, and CF®405M are not recommended for detecting low-abundance targets, and their use in tissue specimens can be challenging. Blue dyes have lower fluorescence and photostability, and cells and tissues exhibit higher autofluorescence at blue wavelengths, resulting in a lower signal-to-noise ratio compared to other colors.

Product attributes

Probe cell localization	membrane/cell surface
Suitable for live or fixed cells	For fixed cells, for live/intact cells
Cell permeability	membrane impermeability
Fixed options	Pre-staining fixation (formaldehyde); post-staining fixation (formaldehyde); pre-staining fixation (methanol); post-staining fixation (methanol); post-staining permeabilization
color	Blue, green, orange, red, far-red, near-infrared

Storage conditions	For detailed information, please refer to the product information sheet. Store at -10 to -35 ° C. Protect the fluorescent conjugate from light. Store at 2-8 ° C for up to 1 week after reconstitution, or at -10 to -35 ° C for up to 12 months.
reconstitution	Dissolve 1 mg of conjugate in 1 mL dH2O.
Antibody/conjugate formulation	Lyophilized, reconstituted to 1 mg/mL in 1X PBS.
Application Instructions	Recommended staining concentration is 1-5 ug/mL. For detailed protocols, please refer to the product information sheet.
Shelf life	If stored as recommended, it is guaranteed for at least 12 months from the date of receipt.

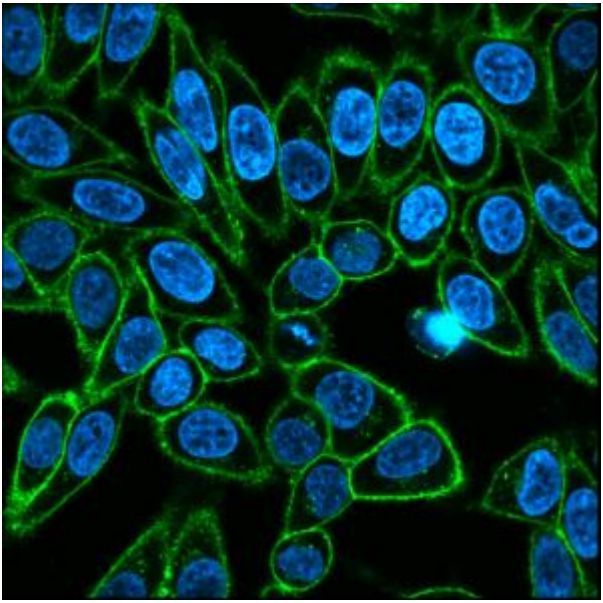

Figure 1. Stained with 5 ug/mL CF®488A WGA (green) and 1 ug/mL Hoechst 33342 (blue) in HBSS at 37° C for 10 minutes, then washed and imaged in PBS.