AF 660 ConA

Article number： KF-YG0699

specification： 1mg/5*1mg

Product description

Concanavalin A (Con A) is a widely used lectin that selectively binds to glycoprotein α-mannopyranosyl and α-pyranosyl glucose. These are commonly found in the cell walls of yeast and fungi, as well as in the cell membranes of mammalian cells and tissues.

• Stains cell walls of yeast and fungi, and cell membranes of mammalian cells and tissues

• Detects glycoconjugates in microscopy and flow cytometry

• Stains glycoproteins in gels • Withstands fixation and permeabilization

• 10 CF® dyes available, from UV to near-infrared

• Superior CF® dyes are bright, photostable, and highly water-soluble

Lectins are also universal probes used for detecting glyco-conjugates in microscopy and flow cytometry applications, as well as for glycoprotein gel staining. In neutral and alkaline solutions, Con A exists as a tetramer with a molecular weight of approximately 104 kDa. In acidic solutions (pH below 5.0), Con A exists as a dimer.

Con A can be used to selectively stain the cell surface of live cells, and it 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.

Find the right dye for your application

Con A and other lectins are carbohydrate-binding proteins that recognize specific sugar moieties on glycoproteins. The presence and distribution of these targets vary by type and tissue. Therefore, other cell surface stains or other lectin conjugates, wheat germ agglutinin (WGA) conjugates, and PNA lectin conjugates may provide better surface and may be more suitable for your cell type. Lectin conjugates can be used to selectively stain the cell surface of live cells and withstand fixation and permeabilization. When cells are 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 type. To find the stain that is right for your application, please view our membrane and cell surface stain comparison, or download our membrane and surface stain brochure. Please refer to our 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	Store the lyophilized conjugate at -20° C, protected from light. When stored as recommended, the product is stable for at least 1 year from the date of receipt.

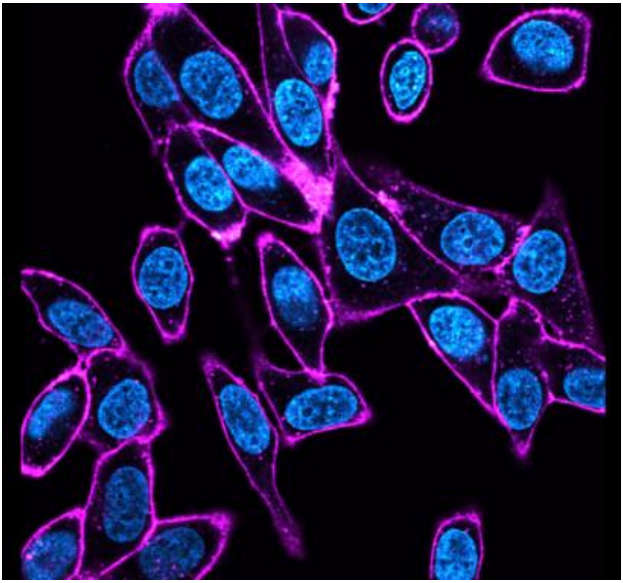

Figure 1. Live HeLa cells were stained with 50 ug/mL CF®640R ConA (magenta) and 1 ug/mL Hoechst 33342 (blue) in HBSS at 37° C for 10 minutes, then washed and imaged in HBSS.