Product Information

CF® Dye PNA Lectin from *Arachis hypogaea* (Peanut)

See product page for a full list of product names, unit sizes, and catalog numbers.

Form: Lyophilized solid

Storage and Handling

Store at -20°C, protected from light. Product is stable for at least one year from the date of receipt when stored as recommended.

Preparing Stock Solutions

Stock solutions can be made at 1 mg/mL in deionized water and stored at 4°C with the addition of 2 mM sodium azide. For longer-term storage, aliquot the conjugate solution and store at -20°C. Avoid repeated freeze-thaw cycles and protect aliquots from light.

Product Technical Information

See product page for spectral properties and other dye-specific technical information. See our Spectra Viewer to view and download the dye excitation and emission spectra.

Product Description

Lectins are proteins or glycoproteins of non-immune origin that agglutinate cells and precipitate complex carbohydrates. Lectins are capable of binding glycoproteins even in the presence of various detergents.

Arachis hypogaea lectin or peanut agglutinin (PNA) is isolated from peanuts and purified by affinity chromatography. The lectin has a molecular weight of 110 kDa and consists of four identical subunits of approximately 27 kDa each. Lectin PNA is specific for terminal β-galactose and binds preferentially to a commonly occurring structure, galactosyl (β-1,3) N-acetylgalactosamine.

PNA does not agglutinate normal human erythrocytes but strongly agglutinates neuraminidase-treated erythrocytes. PNA has anti-T activity similar to the anti-T antibody in human sera. This lectin can be used to distinguish between human lymphocyte subsets.

Experimental Protocols

Centrifuge the protein conjugate solution briefly in a microcentrifuge before use, and use the supernatant to prepare staining solution. This step will eliminate any protein aggregates that may have formed during storage, thereby reducing nonspecific background staining.

The appropriate dilution of lectin PNA conjugate should be determined empirically, as staining protocols vary with application. Typically, a final concentration of 2-20 ug/mL is used for fluorescence staining applications. We recommend diluting the conjugate in HEPES-buffered saline with 4 mg/mL BSA when used for staining.

Related Products

Cat. No.	Product
00070-00079	Cholera Toxin Subunit B CF® Dye Conjugates
29015... 29080	*Concanavalin A* (Con A) CF Dye Conjugates
29021... 29095	Wheat Germ Agglutinin (WGA) Conjugates
29096-29101	*Datura Stramonium* Lectin (DSL) Conjugates
29102-29107	*Lycopersicon Esculentum* (Tomato) Lectin (LEL, TL) Conjugates
29108-29113	*Ulex Europaeus* Agglutinin I (UEA I) Conjugates
29114-29119	*Phaseolus Vulgaris* Leucoagglutinin (PHA-L) Conjugates
30131-30135	CytoLiner™ Fixed Cell Membrane Stains
30021-30024	CellBrite® Cytoplasmic Membrane Dyes
30088-30090	CellBrite® Fix Membrane Stains
30105-30109	CellBrite® Steady Membrane Staining Kits
30092-30104	MemBrite® Fix Cell Surface Staining Kits
32000-1	Live Bacterial Gram Stain Kit
32019, 32020	Bacterial Viability and Gram Stain Kit
30088-30090	BactoView™ Viability Kits
40107-40113	BactoView™ Dead Stains, 500X in Water

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