Peanut Agglutinin (PNA), Rhodamine

RL-1072-5

Product Images

Short Description

Peanut agglutinin binds preferentially to the T-antigen, a galactosyl (β-1,3) *N*-acetylgalactosamine structure present in many glycoconjugates such as M and N blood groups, gangliosides, and many other soluble and membrane-associated glycoproteins and glycolipids. With certain exceptions, the receptor sequence for PNA is normally sialylated which prevents the lectin from binding to its receptor oligosaccharide (see Jacalin). Even sialic acid which is not bound directly to the receptor sugars may inhibit binding. The presence of calcium ions in diluents can enhance the binding of PNA to receptors, possibly by neutralizing the negative charges on sialic acid residues adjacent to the receptor sequence.

Rhodamine labeled Peanut agglutinin has an appropriate number of fluorochromes bound to provide the optimum staining characteristics for this lectin. This conjugate is supplied essentially free of unconjugated fluorochromes. The excitation maximum is at 550 nm and the emission maximum is at 575 nm.

Additional Information

Unit Size	5 mg
Applications	Immunofluorescence, Glycobiology
Recommended Usage	The recommended concentration range for use is 5-20 µg/ml.
Recommended Storage	2-8 °C
Maximum Excitation	545-555nm
Inhibiting and/or Eluting Sugar	200 mM galactose (S-9003)
Maximum Emission	570-580 nm
Solution	10 mM HEPES, 0.15 M NaCl, pH 7.5, 0.08% sodium azide, 0.1 mM $CaCl_2$
Concentration	5 mg active conjugate/ml
Conjugate	Rhodamine
Color of Fluorescence	Red
Sugar Specificity	Galactose