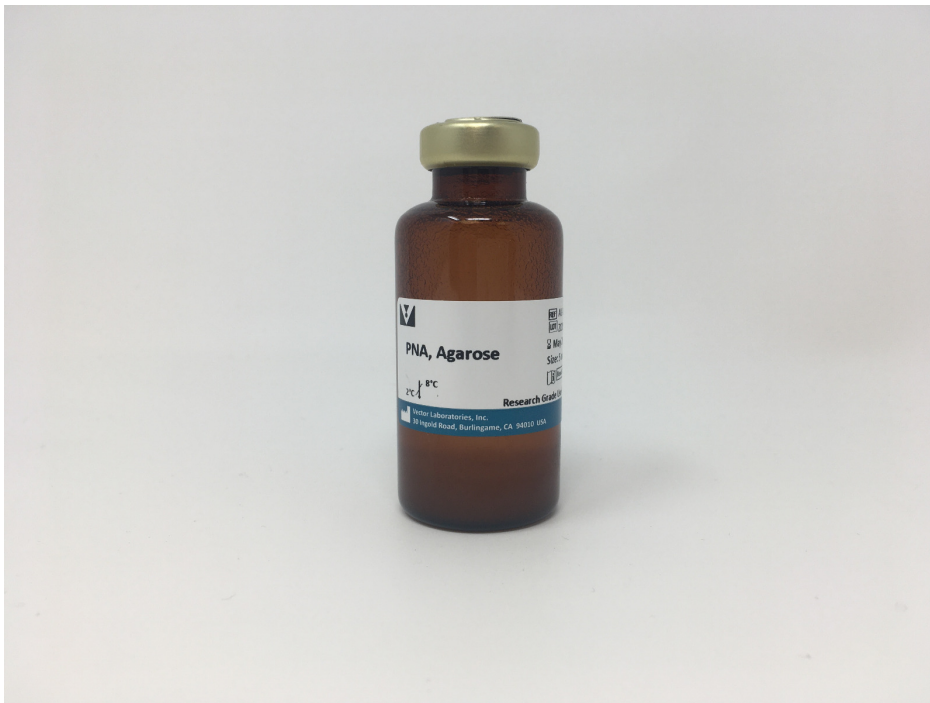




Peanut Agglutinin (PNA), Agarose bound

AL-1073

Product Images



Short Description

Agarose bound PNA is prepared using our affinity-purified lectins. 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.

Features:

- Bead diameter ranges in size from 45-165 microns
- Matrix is stable in solutions at pH 3-11 as well as many organic solvents
- Immobilized lectins are prepared using affinity purified lectins
- Conjugated proteins are not leached off the beads by Tris or other routinely used buffers
- No residual charges present after conjugation. This minimizes non-specific binding to the matrix
- Product supplied as a 1:1 suspension in buffer
- Inhibiting/Eluting Sugar: 200 mM galactose or Glycoprotein Eluting Solution (ES-2100)

Additional Information

Unit Size	2 ml, 5 ml
Applications	Glycobiology, Affinity Chromatography
Recommended Storage	2-8 °C DO NOT FREEZE
Solution	10 mM HEPES, pH 7.5, 0.15 M NaCl, 0.1 mM CaCl ₂ , 20 mM galactose, 0.08% sodium azide
Recommended Usage	<p>Wash gel thoroughly with buffer before use to remove sugar added to stabilize the lectin. Use of buffers containing 0.1 mM CaCl₂ and 0.01 mM MnCl₂ is recommended. Recommended product for eluting glycoconjugates bound to this agarose-lectin: Glycoprotein Eluting Solution, Cat. No. ES-2100. Alternatively, 200 mM galactose in 10 mM HEPES-buffered saline, pH 7.5 can be used. For those glycoconjugates having very high affinity for PNA, it may be necessary to lower the pH of the eluting sugar solution to pH 3.0 with acetic acid. After use, wash the gel with several column volumes of buffered saline, then resuspend gel in buffered saline containing 0.08% sodium azide for storage.</p>
Matrix Conjugate	Lectins
Sugar Specificity	Galactose
Conjugate	Agarose

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- Bead diameter ranges in size from 45-165 microns
- Matrix is stable in solutions at pH 3-11 as well as many organic solvents
- Immobilized lectins are prepared using affinity purified lectins
- Covalent attachment preserves lectin activity and minimizes conformational changes that might result in nonspecific or hydrophobic interactions
- Hydrophilic spacer arm is inserted between the lectin and the matrix
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- Product supplied as a 1:1 suspension in buffer
- 5 mg lectin/ml gel
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