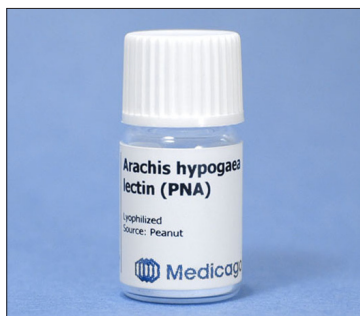




## Arachis hypogaea lectin (PNA, Peanut Agglutinin)

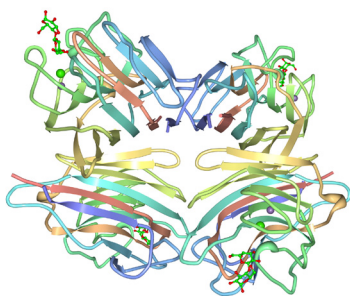


### Features

- Ultrapure quality
- Strong anti-T activity
- Sugar specificity:  $\beta$ -D-Gal-(1-3)-D-GalNAc
- Agglutinates rabbit erythrocytes at  $< 0.1 \mu\text{g/ml}$  after trypsin treatment of the cells
- Lyophilized powder

### Product description

*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 (1).



**Figure 1:** Crystal structure of peanut lectin (2)

PNA is a carbohydrate-free protein that displays specificity towards  $\beta$ -D-Gal(1-3)-D-galNAc (3). It has potent anti-T activity and can be used to distinguish between human lymphocyte subsets. PNA has been used in tumour tissue determination for transitional mucosa malignancies. The lectin agglutinates rabbit erythrocytes at  $< 0.1 \mu\text{g/ml}$  after trypsin treatment of cells and its activity is inhibited by lactose and galactose (1).

Medicago's PNA lectin is provided as a white to light-yellow lyophilized powder from 10 mM  $\text{NH}_4\text{HCO}_3$ . The purity is determined by SDS-PAGE, which generates one major band at 25-27 kDa. The lectin is available in vials containing 50 mg or 10 mg lyophilized powder and the product is to be used for laboratory work only.

### Applications

- Probe in histochemistry and immuno-histochemistry
- Human erythrocyte/lymphocyte subset studies

### Specifications

Appearance	White to light-yellow lyophilized powder
Source	Peanuts
Molecular weight	110 kDa
Activity	Agglutinates rabbit erythrocytes at $< 0.1 \mu\text{g/ml}$ . Agglutination fully inhibited by 10 mM D-galactose
Microorganisms	$< 100 \text{ CFU/g}$
Protein content	$> 85\%$
Identity	SDS-PAGE, one major band at 25-27 kDa
Shelf life	$> \text{Three years}$ when stored at $-20^\circ\text{C}$

### Directions for use

The lectin may be reconstituted with 2 ml of sterile PBS buffer, pH 7.4 before use, spin the vial gently until full dissolution.

### Shipping and storage

The product is shipped at  $-20^\circ\text{C}$  however for over-the-day transport it may be shipped at ambient temperature. The lyophilized powder is stable for more than three years from production date when stored below  $-20^\circ\text{C}$ . After reconstitution with PBS buffer, the solution may be stored frozen in working aliquots for up to 12 months.

### Tips and hints

Avoid repeated freezing and thawing.