ImmunoBioScience Corp. (IBSC) *DATA SHEET*

Biotin conjugatedPNA (*Arachis hypogaea* (peanuts)*)*

**Catalog number:**  LE-6883-11

**Description:** Peanut lectin (PNA) is an identical tetrameric carbohydrate free protein with MW of 110 kDa. Thomsen-Friedenreich antigen, T-antigen (Galβ1, 3GalNAc) is present on blood group M &N glycoproteins (after removal of sialic acid with neuraminidase), glyconjugates (Mucin type), gangliosides and many glycolipids. T antigen is rarely expressed on normal coloncytes whereas cells of malignant, premalignant cells express this antigen. Peanut lectin has widely been used to detect T antigen in malignant and premalignant cells. Peanut lectin contains one atom of Ca++ and Mg++ per unit.

**Unit**: 1 ml Concentration**:** 5 mg/ml

**Conjugation:** Affinity purified PNA is conjugated with Biotin and purified in gel filtration column.

**Intended Use**: Histochemistry 1: 250-1:1000; WB 1:500-1:2,500; ELISA 1:500-1:2,500.

Dilute biotinylated lectin in PBS containing 0.1 mM calcium chloride ions.

For Histochemistry the tissues are processed same as for Immunohistochemistry, after blocking step biotinylated lectin is applied followed by streptavidin conjugated to enzyme and chromogen. For WB incubate membrane with blocking protein followed by biotinylated lectin, streptavidin enzyme conjugate and chromogen. For ELISA the target proteins are absorbed on ELISA plate at a concentration of 5-10 µg/ml (50-100 µl), followed by blocking with protein solution, Biotinylated lectin, Streptavidin enzyme conjugate, ELISA substrate. Please refer to Histochemistry, WB and ELISA protocol for detail information.

The optimum dilution should be determined by the individual lab.

**Storage: Storage**: 2-8°C

**Buffer:** 10 bicarbonate, 150 mM NaCl, pH 8.2, 0.1 mM Calcium chloride and 0.05% sodium azide

**Inhibiting/Eluting sugars:** 200 mM Galactose

**Carbohydrate-Binding Specificity of WGA:** Galβ1, 3 GalNAc>>>>>GalNAc>Gal

**References:**

1. Bird, G Vox sang. 9: 748-759, 1964
2. Lotan, R etal. J Biol. Chem. 250: 8518-8523, 1975
3. Itzkowitz, SH etal. Cancer Research 49: 197-204, 1989
4. Yuan, M etal. Cancer research 46: 4841-4847, 1986

**Limitation and warranty:** Our warranty is limited to the actual price paid for the product. We are not liable for any property damage, personnel injury, time, effort or economic loss due to our product.

**MSDS:** This product contains 0.05 % sodium azide as a preservative, appropriate care should be taken in handling. National Institute of Occupational Safety and Health has warning that sodium azide can react with lead, copper, brass or solder in the plumbing system and forms hydrazoic acid in acidic condition. Discard with copious amount of water. Avoid skin and eye contact with all laboratory products. Use appropriate lab. gear, lab coat , gloves and safety glasses. Do not ingest any lab. products. This product is not approved for administration in human or animals.

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