ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Neuronal Pentraxin(NPX2) Antibodies

Cat. # NPX21-P	Mouse NPX2 control peptide # 1	**SIZE**: 100 ug
Cat. # NPX21-A	**Rabbit** Anti-Mouse NPX2 IgG # 1 (aff pure)	**SIZE**: 100 ug

Pentraxins are a family of proteins emerging from genes that are conserved in their carboxy-terminal halves a pentraxin domain and are prototypical acute phase proteins with acquired novel amino-terminal domains. Pentraxins, include C reactive protein (CRP) and Serum Amyloid P component (SAP), which serve as indicators of inflammatory reactions as a result of the exposure of liver cells to cytokines, mainly interleukin-6 (IL-6).

Neuronal Pentraxins: A new family of putative integral membrane pentraxins or Neuronal pentraxins identified through interaction with a presynaptic snake venom toxin taipoxin. NPX1, NPX2 and NPXR (Neuronal Pentraxin Receptor), the three neuronal pentraxins represent a novel neuronal uptake pathway that may function during synapse formation and remodeling. The N-terminal half of neuronal pentraxins are 20-30% identical to previously identified pentraxins (CRP and SAP), the three neuronal pentraxins are 50% identical to each other and are significantly larger than the classical pentraxins (>50 versus 30kDa), suggesting that they may have additional novel functions.

NPX2 (Neuronal Pentraxin 2), 429aa in mouse, 432 in rat and 431 in human (chr 7q21), mainly expressed in brain, pancrease, liver and testis. It is likely to play role in the modification of cellular properties that underlie long-term plasticity. NPX1, NPX2 has potential N-linked glycosylation sites.

Source of Antigen and Antibodies

Antigen	17-aa peptide from **Mouse NPX2** (1); **Designation (NPX21-P, control peptide**) conjugated to KLH; epitope location ~ N-terminus
Ab Host/type	Rabbit, Polyclonal Aff pure IgG (**cat # NPX21-A**) purified over antigen-agarose column
2-ab	**Goat Anti-rabbit IgG-HRP** cat # 20320 (AP, biotin, FITC conjugates also available)
-ve control IgG	**# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as –ve control**

Form & Storage of Antibodies/Peptide Control

Affinity pure IgG
100 ug/100ul solution lyophilized powder
Supplied in **Buffer**: PBS+0.1% BSA
Reconstitute powder in PBS at 1mg/ml

Control/blocking peptide
100 ug/100 ul solution lyophilized powder
Supplied in Buffer: PBS pH 7.5,
Reconstitute powder in PBS at 1 mg/ml.

Storage
Short-term: unopened, undiluted liquid vials at -20OC and powder at 4oC or -20oC..

Long-term: at –20C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at –20oC or below.
Shipping: 4oC for solutions and room temp for powder.

Recommended Usage

Western Blotting (1-10 ug/ml for affinity pure antibody using ECL technique).

ELISA: Control peptide can be used to coat ELISA plates at 1 ug/ml and detected with antibodies (0.5-1 ug/ml for affinity pure).

Histochemistry & Immunofluorescence: Not tested. We recommend the use of aff pure IgG at 2-20 ug/ml.

Specificity & Cross-reactivity

The Mouse NPX21-P control peptide is 100% conserved in rat, and 94% in human NPX2 and 82% in guinea pig apexin precurso P50. Antibody cross-reactivity in various species has not been studied. Control peptide, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking experiments (use 5-10 ug control peptide per 1 ug of aff pure IgG or 1 ul antiserum) to confirm antibody specificity (see detailed protocol see detailed protocol at the web site).).

General References: Laura L. Kirkpatrick et al, (2000) JBC, Vol 275, No: 23, 17786-17792; Kamyar Zahedi et al (1997) JBC, Vol 272, No: 4, 2143-2148; Martino Introna et al (1996) Blood, Vol 87, No: 5 , 1868-1872.

*This product is for In vitro research use only.

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NPX21-A-P 71213A

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