

NPTX2 Antibody

Catalog # ASC10682

Specification

NPTX2 Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality

Isotype Application Notes **IF, WB** <u>P47972</u>

NP_002514, 4885 Human, Mouse, Rat

Rabbit Polyclonal

IgG

NPTX2 antibody can be used for detection of NPTX2 by Western blot at 0.5 and 1 μ g/mL. Antibody can also be used for immunohistochemistry starting at 5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

NPTX2 Antibody - Additional Information

Gene ID 4885

Target/Specificity

NPTX2 antibody was raised against a 16 amino acid synthetic peptide near the center of the human NPTX2.

hr>The immunogen is located within amino acids 170 - 220 of NPTX2.

Reconstitution & Storage

NPTX2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

NPTX2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

NPTX2 Antibody - Protein Information

Name NPTX2

Function

Likely to play role in the modification of cellular properties that underlie long-term plasticity. Binds to agar matrix in a calcium-dependent manner (By similarity).

Cellular Location

Secreted.

Tissue Location

Brain, pancreas, liver, heart and skeletal muscle. Highest levels are seen in the testis

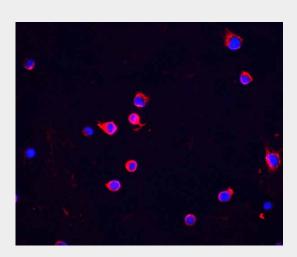


NPTX2 Antibody - Protocols

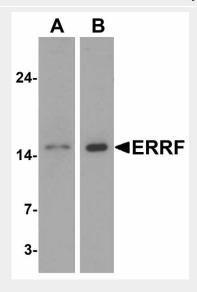
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

NPTX2 Antibody - Images



Immunofluorescence of Chk2 in Jurkat cells with Chk2 antibody at 5 µg/mL



Western blot analysis of ERRF in (A) HeLa and (B) A-20 cell lysate with ERRF antibody at 1 µg/mL.

NPTX2 Antibody - Background

NPTX2 Antibody: Neuronal pentraxin (NPTX) 2 was initially identified as a member of the pentraxin family having high homology to NPTX1. Unlike NPTX1 however, NPTX2 is expressed in testes, pancreas, liver, heart, skeletal muscle as well as brain. NPTX2 possesses the lectin properties common to the pentraxin family, promotes neurite outgrowth, and is rapidly regulated by neuronal





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activity. NPTX1 and NPTX2 form heterocomplexes that contribute to both activity-independent and -dependent excitatory synaptogenesis. Recently, NPTX2 has been found to be highly upregulated in Parkinsonian substantia nigra and localizes to Lewy bodies and Lewy neurites in sporadic Parkinson's disease (PD), suggesting that it is involved in the pathway dysregulation that underlies PD. This NPTX2 antibody is predicted to be specific to NPTX2 and not recognize NPTX1.

NPTX2 Antibody - References

Hsu YC and Perin MS. Human neuronal pentraxin II (NPTX2): conservation, genomic structure, and chromosomal localization. Genomics1995; 28:220-7.

Tsu CC, Copeland GG, Gilbert DJ, et al. Narp, a novel member of the pentraxin family, promotes neurite outgrowth and is dynamically regulated by neuronal activity. J. Neurosci.1996; 16:2463-78. Xu D, Hopf C, Reddy R, et al. Narp and NP1 form heterocomplexes that function in developmental and activity-dependent synaptic plasticity. Neuron2003; 39:513-28.

Moran LB, Hickey L, Michael GJ, et al. Neuronal pentraxin II is highly upregulated in Parkinson's disease and a novel component of Lewy bodies. Acta Neuropathol. 2008; 115:471-8.