

NPTX2 Antibody

Catalog # ASC10682

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	P47972
Other Accession	NP_002514 , 28195384
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	47042
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	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.

Additional Information

Gene ID	4885
Other Names	Neuronal pentraxin-2, NP2, Neuronal pentraxin II, NP-II, NPTX2
Target/Specificity	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.

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

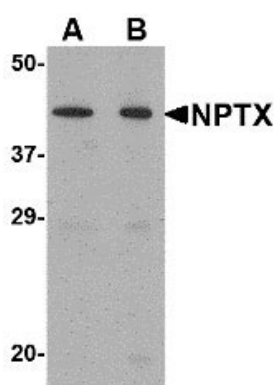
Background

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 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.

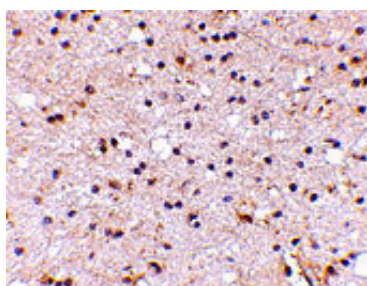
References

Hsu YC and Perin MS. Human neuronal pentraxin II (NPTX2): conservation, genomic structure, and chromosomal localization. *Genomics*1995; 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. *Neuron*2003; 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.

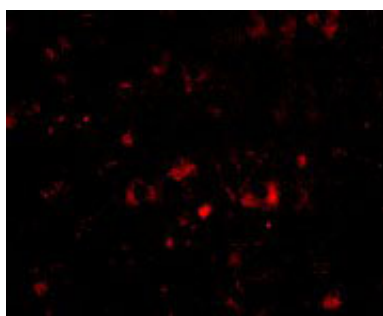
Images



Western blot analysis of NPTX2 in mouse brain tissue lysate with NPTX2 antibody at (A) 0.5 and (B) 1 µg/mL.



Immunohistochemistry of NPTX2 in human brain with NPTX2 antibody at 5 µg/mL.



Immunofluorescence of NPTX2 in Human Brain cells with NPTX2 antibody at 20 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.