### For Research Use Only

# NPTX2 Polyclonal antibody

Catalog Number: 10889-1-AP

Featured Product

20 Publications



**Basic Information** 

Catalog Number: 10889-1-AP

Source: Rabbit

Isotype: IgG

Immunogen Catalog Number:

AG1326

GenBank Accession Number:

BC009924 GeneID (NCBI): 4885

**UNIPROT ID:** P47972 Full Name:

neuronal pentraxin II

Calculated MW: 47 kDa

Observed MW: 47-50 kDa

**Purification Method:** 

Antigen affinity purification

Recommended Dilutions:

WB: 1:1000-1:6000 IP: 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC: 1:50-1:500 IF/ICC: 1:50-1:500

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, IP, ELISA

Cited Applications: WB, IHC, IF, CoIP

Species Specificity: human, mouse, rat

**Cited Species:** human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: mouse brain tissue, SH-SY5Y cells, PC-3 cells, rat

brain tissue

IP: mouse brain tissue,

IHC: human brain tissue, human pancreas cancer

tissue, rat brain tissue IF/ICC: SH-SY5Y cells,

# **Background Information**

Neuronal pentraxins constitute a family of proteins that are homologous to C-reactive protein (CRP) and serum amyloid P component (SAP), including NPTX1, NPTX2, and the neuronal pentraxin receptor (NPTXR). NPTX2, also  $known \, as \, NARP \, (neuronal \, activity-regulated \, pentaxin), \, is \, a \, secreted \, protein \, involved \, in \, excitatory \, synapse \, activity-regulated \, pentaxin), \, is \, a \, secreted \, protein \, involved \, in \, excitatory \, synapse \, activity-regulated \, pentaxin), \, is \, a \, secreted \, protein \, involved \, in \, excitatory \, synapse \, activity-regulated \, pentaxin), \, is \, a \, secreted \, protein \, involved \, in \, excitatory \, synapse \, activity-regulated \, pentaxin), \, is \, a \, secreted \, protein \, involved \, in \, excitatory \, synapse \, activity-regulated \, pentaxin), \, is \, a \, secreted \, protein \, involved \, in \, excitatory \, synapse \, activity-regulated \, pentaxin), \, is \, a \, secreted \, protein \, involved \, in \, excitatory \, synapse \, activity-regulated \, pentaxin), \, is \, a \, secreted \, protein \, involved \, in \, excitatory \, synapse \, activity-regulated \, pentaxin), \, is \, a \, secreted \, protein \, involved \, in \, excitatory \, synapse \, activity-regulated \, pentaxin \, activity-regulated \, pentaxin \, activity-regulated \, activity-regulated \, activity-regulated \, pentaxin \, activity-regulated \, ac$ formation. It also plays a role in the clustering of alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic acid (AMPA)-type glutamate receptors at established synapses, resulting in non-apoptotic cell death of dopaminergic nerve cells. NPTX2 is highly up-regulated in Parkinson's disease (PD), suggesting it may be involved in the pathology of PD. (PMID: 12895424; 17987278; 10748068)

#### **Notable Publications**

Author	Pubmed ID	Journal	Application
Long Pei	34565284	Bioengineered	WB
Xu-Qiao Chen	36370135	Alzheimers Dement	WB
Simon Chang	29844474	Neuropsychopharmacology	IHC,IF

Storage

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

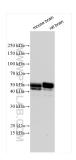
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

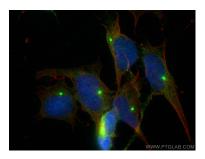
T: 4006900926 E: Proteintech-CN@ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

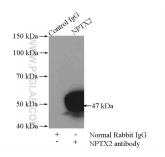
## **Selected Validation Data**



Various lysates were subjected to SDS PAGE followed by western blot with 10889-1-AP (NPTX2 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



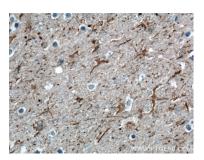
Immunofluorescent analysis of (4% PFA) fixed SH-SY5Y cells using NPTX2 antibody (10889-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).



IP result of anti-NPTX2 (IP:10889-1-AP, 4ug; Detection:10889-1-AP 1:600) with mouse brain tissue lysate 4000ug.



Immunohistochemical analysis of paraffinembedded human brain tissue slide using 10889-1-AP (NPTX2 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human brain tissue slide using 10889-1-AP (NPTX2 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).