BOSTER
antibody and ELISA experts

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Anti-Neuronal pentraxin-2 NPTX2 Antibody

Catalog Number: A09667

About NPTX2

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.

Overview

Product Name	Anti-Neuronal pentraxin-2 NPTX2 Antibody
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Neuronal pentraxin-2 NPTX2 Antibody (Catalog # A09667). Tested in ELISA, WB, IHC-P, IF applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, IF, IHC-P, WB
Clonality	Polyclonal
Formulation	NPTX2 Antibody is supplied in PBS containing 0.02% sodium azide.
Storage Instructions	NPTX2 antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.
Host	Rabbit
Uniprot ID	P47972

Technical Details

Immunogen	Anti-NPTX2 antibody was raised against a peptide corresponding to 16 amino acids near the center of human NPTX2. The immunogen is located within amino acids 170 - 220 of NPTX2.
Predicted Reactive Species	Guinea Pig
Isotype	IgG
Form	Liquid
Concentration	1 mg/mL
Purification	NPTX2 Antibody is affinity chromatography purified via peptide column.

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Suggested Dilutions	WB: 0.5-4 ug/mL; IHC: 5 ug/mL; IF: 20 ug/mL. Antibody validated: Western Blot in human, mouse and rat samples; Immunohistochemistry in human and mouse samples; Immunofluorescence in human and mouse samples. All other applications and species not yet tested. Optimal dilutions for each application should be determined by the researcher.

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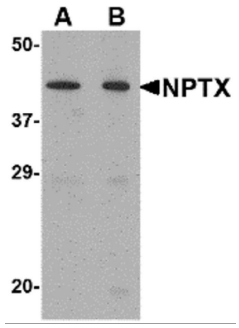
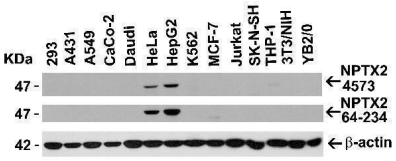
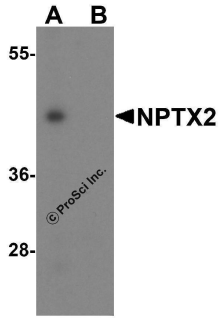
Anti-Neuronal pentraxin-2 NPTX2 Antibody (A09667) Images



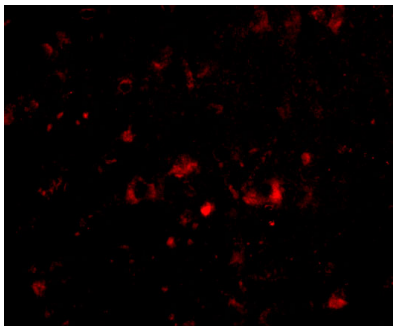
Western Blot Validation in Mouse Brain Tissue Lysate Loading: 15 ug of lysates per lane. Antibodies: NPTX2 A09667 (A: 0.5 ug/mL, B: 1 ug/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



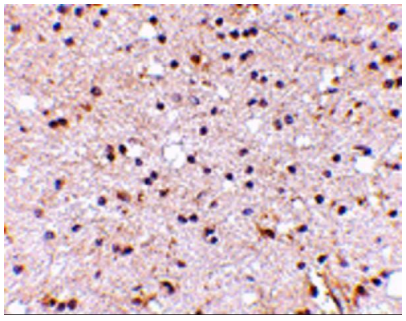
Independent Antibody Validation (IAV) via Protein Expression Profile in Cell Lines Loading: 15 ug of lysates per lane. Antibodies: NPTX2 A09667 (2 ug/mL), NPTX2 64-234 (4 ug/mL), and beta-actin 3779 (1 ug/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Western Blot Validation in Mouse Brain Tissue Lysate Loading: 15 ug of lysates per lane. Antibodies: NPTX2 A09667 (1 ug/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution. A: Absence of blocking peptide B: Presence of blocking peptide.



Immunofluorescence Validation of NPTX2 in Human Brain Tissue Immunofluorescent analysis of 4% paraformaldehyde-fixed human brain tissue labeling NPTX2 with A09667 at 20 ug/mL, followed by goat anti-rabbit IgG secondary antibody at 1/500 dilution (red).



Immunohistochemistry Validation of NPTX2 in Human Brain Immunohistochemical analysis of paraffin-embedded human brain using anti-NPTX2 antibody (A09667) at 5 ug/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4 ˚C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.

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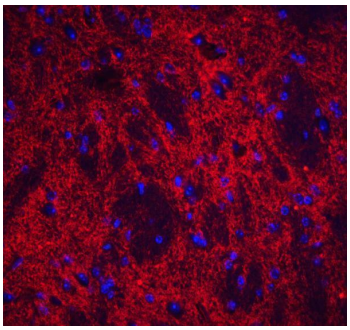
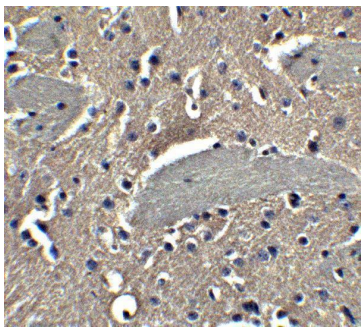


Immunofluorescence Validation of NPTX2 in Mouse Brain Tissue Immunofluorescent analysis of 4% paraformaldehyde-fixed mouse brain issue labeling NPTX2 with A09667 at 20 ug/mL, followed by goat anti-rabbit IgG secondary antibody at 1/500 dilution (red) and DAPI staining (blue).



Immunohistochemistry Validation of NPTX2 in Mouse Brain Tissue Immunohistochemical analysis of paraffin-embedded mouse brain issue using anti-NPTX2 antibody (A09667) at 5 ug/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4˚C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.

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