

Rabbit Syntaxin 1A Polyclonal Antibody | anti-STX1A antibody

Syntaxin 1A Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA322438	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

Syntaxin 1A; Polyclonal Antibody; Syntaxin 1A Antibody; HPC 1; Neuron specific antigen HPC1; Neuron-specific antigen HPC-1; OTTHUMP00000174615; OTTHUMP00000174616; OTTHUMP00000174617; OTTHUMP00000174618; P35-1; STX1; STX1A; STX1A_HUMAN; SYN1A; Syntaxin 1A (brain); Syntaxin 1A brain; Syntaxin-1A; anti-STX1A antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Syntaxin 1A antibody detects endogenous levels of total Syntaxin 1A
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	251
Applicable Applications for anti-STX1A antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Syntaxin 1A
Subcellular Location	Secreted and Cytoplasmic Vesicle > Secretory Vesicle > Synaptic Vesicle Membrane. Cell Junction > Synapse > Synaptosome.
Tissue Specificity	Isoform 1 is highly expressed in embryonic spinal chord and ganglia and in adult cerebellum and cerebral cortex. Isoform 2 is expressed in heart, liver, fat, skeletal muscle, kidney and brain.
Predicted Cross Reactivity	Bovine, Sheep
Similarity	Bovine (100%), Sheep (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of Syntaxin 1A expression in HT29 whole cell lysates, The lane on the left is treated with the antigen-specific peptide.



IHC (Immunohistochemistry)

AAA322438 at 1/100 staining human brain tissues sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 70 degree C



IF (Immunofluorescence)

AAA322438 staining PC12 cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.



IHC (Immunohistochemistry)

AAA322438 at 1/100 staining Mouse liver tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-STX1A antibody

Description: STX1A is a type IV membrane protein involved in docking of synaptic vesicles at presynaptic active zones. May play a critical role in neurotransmitter exocytosis. Part of the SNARE core complex containing SNAP25, VAMP2 and STX1A. Three splice variant isoforms have been described.

Function: Plays a role in hormone and neurotransmitter exocytosis (By similarity). Potentially involved in docking of synaptic vesicles at presynaptic active zones. May mediate Ca2+-regulation of exocytosis acrosomal reaction in sperm.

Subunit Structure: Interacts (via C-terminus) with KCNB1 (via C-terminus); the interaction increases in a calcium-dependent manner and induces a pore-independent enhancement of exocytosis in neuroendocrine cells, chromaffin cells, pancreatic beta cells and from the soma of dorsal root ganglia (DRG) neurons (By similarity). Part of the SNARE core complex containing SNAP25, VAMP2 and STX1A (By similarity). This complex binds to CPLX1 (By similarity). Binds SYTL4 and STXBP6 (By similarity). Found in a ternary complex with STX1A and SNAP25 (By similarity). Interacts with PLCL1 (via C2 domain) (By similarity). Interacts with OTOF and LGI3 (By similarity). Interacts with SLC6A4 (By similarity). Interacts with SYT6 and SYT8; the interaction is Ca2+-dependent (By similarity). Found in a complex with VAMP8 and SNAP23 (PubMed:12130530). Interacts with VAPA and SYBU (PubMed:15459722). Interacts with STXBP1 and DAPK1 (PubMed:12730201). Interacts with PRRT2 (By similarity).

Post-translational Modifications: Phosphorylated by CK2 (By similarity). Phosphorylation at Ser-188 by DAPK1 significantly decreases its interaction with STXBP1.

Similarity: Belongs to the syntaxin family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	259906442
NCBI GeneID	6804
NCBI Accession #	NP_001159375.1
NCBI GenBank Nucleotide #	NM_001165903.1
UniProt Accession #	Q16623; O15447; O15448; Q12936; Q75MD9; Q7Z5K3; Q9BPZ6
Molecular Weight	Observed: 35 kDa Predicted: 34 kDa
NCBI Official Full Name	syntaxin-1A isoform 2
NCBI Official Synonym Full Names	syntaxin 1A
NCBI Official Symbol	STX1A

NCBI Official Synonym Symbols	STX1; HPC-1; P35-1; SYN1A
NCBI Protein Information	syntaxin-1A
UniProt Protein Name	Syntaxin-1A
UniProt Gene Name	STX1A
UniProt Synonym Gene Names	STX1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/syntaxin-1a-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/322438>