

STXBP1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6623c

Specification

STXBP1 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Antigen Region WB, IHC-P, FC,E <u>P61764</u> <u>P61765</u>, <u>O08599</u>, <u>P61763</u> Human Bovine, Mouse, Rat Rabbit Polyclonal Rabbit IgG 169-197

STXBP1 Antibody (Center) - Additional Information

Gene ID 6812

Other Names Syntaxin-binding protein 1, MUNC18-1, N-Sec1, Protein unc-18 homolog 1, Unc18-1, Protein unc-18 homolog A, Unc-18A, p67, STXBP1, UNC18A

Target/Specificity

This STXBP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 169-197 amino acids from the Central region of human STXBP1.

Dilution WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

STXBP1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

STXBP1 Antibody (Center) - Protein Information



Name STXBP1

Synonyms UNC18A

Function Participates in the regulation of synaptic vesicle docking and fusion through interaction with GTP-binding proteins (By similarity). Essential for neurotransmission and binds syntaxin, a component of the synaptic vesicle fusion machinery probably in a 1:1 ratio. Can interact with syntaxins 1, 2, and 3 but not syntaxin 4. Involved in the release of neurotransmitters from neurons through interacting with SNARE complex component STX1A and mediating the assembly of the SNARE complex at synaptic membranes (By similarity). May play a role in determining the specificity of intracellular fusion reactions.

Cellular Location

Cytoplasm, cytosol. Membrane; Peripheral membrane protein

Tissue Location Brain and spinal cord. Highly enriched in axons.

STXBP1 Antibody (Center) - Protocols

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

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

STXBP1 Antibody (Center) - Images



Western blot analysis of STXBP1 antibody (Center) (Cat. #AP6623c) in NCI-H460 cell line lysates (35ug/lane). STXBP1 (arrow) was detected using the purified Pab.





Formalin-fixed and paraffin-embedded human brain tissue reacted with STXBP1 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



STXBP1 Antibody (Center) (Cat. #AP6623c) flow cytometric analysis of NCI-H292 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

STXBP1 Antibody (Center) - Background

STXBP1 may participate in the regulation of synaptic vesicle docking and fusion, possibly through interaction with GTP-binding proteins. The protein is essential for neurotransmission and binds syntaxin, a component of the synaptic vesicle fusion machinery probably in a 1:1 ratio. It can interact with syntaxins 1, 2, and 3 but not syntaxin 4 and may play a role in determining the specificity of intracellular fusion reactions.

STXBP1 Antibody (Center) - References

Behan,A.T., Mol. Psychiatry 14 (6), 601-613 (2009) Saitsu,H., Nat. Genet. 40 (6), 782-788 (2008)