

KD-Validated Anti-Syntaxin binding protein 1 Rabbit Monoclonal Antibody Rabbit monoclonal antibody

Catalog # AGI1286

Specification

KD-Validated Anti-Syntaxin binding protein 1 Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Reactivity Clonality Isotype Calculated MW Gene Name Aliases	WB, FC, ICC <u>P61764</u> Rat, Human, Mouse Monoclonal Rabbit IgG Predicted, 68 kDa , observed, 68 kDa KDa STXBP1 STXBP1; Syntaxin Binding Protein 1; MUNC18-1; Syntaxin-Binding Protein 1; UNC18: Protein Unc-18 Homolog 1: Protein
	UNC18; Protein Unc-18 Homolog 1; Protein Unc-18 Homolog A; Unc-18A; Unc18-1; HUNC18; N-Sec1; RBSEC1; NSEC1; P67; Neuronal SEC1; RbSec1; UNC18A; NSec1; DEE4
Immunogen	A synthesized peptide derived from human STXBP1

KD-Validated Anti-Syntaxin binding protein 1 Rabbit Monoclonal Antibody - 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

KD-Validated Anti-Syntaxin binding protein 1 Rabbit Monoclonal Antibody - 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.

KD-Validated Anti-Syntaxin binding protein 1 Rabbit Monoclonal Antibody - Protocols

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

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

KD-Validated Anti-Syntaxin binding protein 1 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Syntaxin binding protein 1 antibody (Cat#AGI1286). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Syntaxin binding protein 1 antibody (Cat#AGI1286, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Syntaxin binding protein 1 antibody (Cat#AGI1286). Syntaxin binding protein 1 expression in wild type (WT) and syntaxin binding protein 1 shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-Syntaxin binding protein 1 antibody (Cat#AGI1286, 1:5,000) and



HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Syntaxin binding protein 1 expression in C2C12 cells using Syntaxin binding protein 1 antibody (Cat#AGI1286, 1:2,000). Green, isotype control; red, Syntaxin binding protein 1.



Immunocytochemical staining of C2C12 cells with Syntaxin binding protein 1 antibody (Cat#AGI1286, 1:1,000). Nuclei were stained blue with DAPI; Syntaxin binding protein 1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.