

**Goat Anti-MUNC18 / STXBP1 (isoform a) Antibody**  
Peptide-affinity purified goat antibody  
Catalog # AF1696a

**Specification**

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**Goat Anti-MUNC18 / STXBP1 (isoform a) Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P61764</a>
Other Accession	<a href="#">NP_003156</a> , <a href="#">6812</a> , <a href="#">20910 (mouse)</a>
Reactivity	Human, Mouse
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	67569

**Goat Anti-MUNC18 / STXBP1 (isoform a) 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

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-MUNC18 / STXBP1 (isoform a) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-MUNC18 / STXBP1 (isoform a) 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**

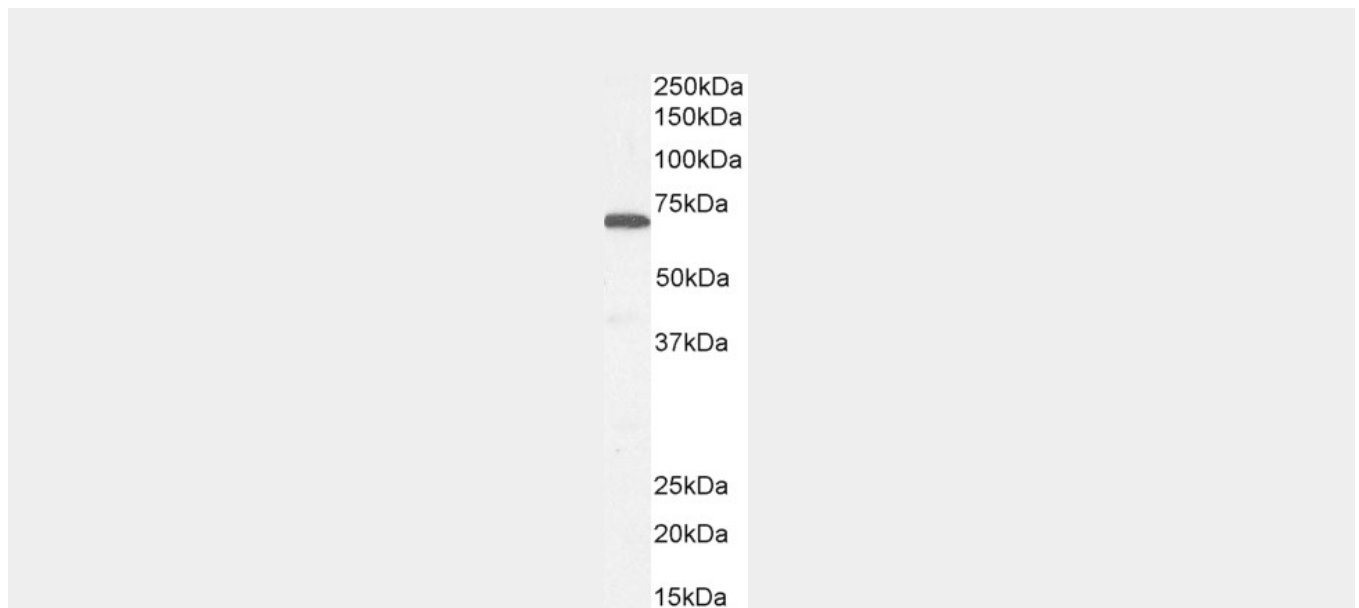
Brain and spinal cord. Highly enriched in axons.

### **Goat Anti-MUNC18 / STXBP1 (isoform a) Antibody - Protocols**

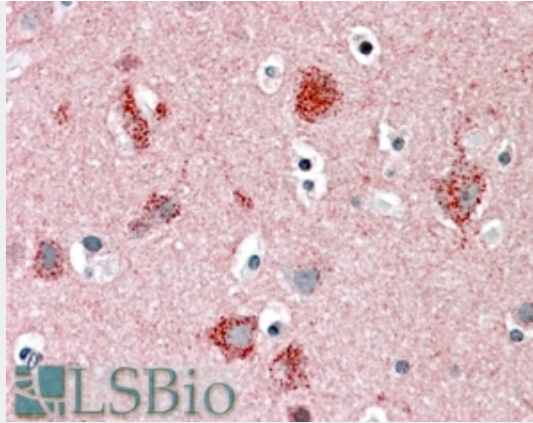
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **Goat Anti-MUNC18 / STXBP1 (isoform a) Antibody - Images**



AF1696a (0.1µg/ml) staining of Human Cerebellum lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



AF1696a (5µg/ml) staining of paraffin embedded Human Cortex. Steamed antigen retrieval with citrate buffer pH 6, AP-staining. **This data is from a previous batch, not on sale.**



AF1696a (0.3µg/ml) staining of Mouse Brain lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.

### Goat Anti-MUNC18 / STXBP1 (isoform a) Antibody - Background

This gene encodes a syntaxin-binding protein. The encoded protein appears to play a role in release of neurotransmitters via regulation of syntaxin, a transmembrane attachment protein receptor. Mutations in this gene have been associated with infantile epileptic encephalopathy-4. Alternatively spliced transcript variants have been described.

### Goat Anti-MUNC18 / STXBP1 (isoform a) Antibody - References

Proteome analysis of the thalamus and cerebrospinal fluid reveals glycolysis dysfunction and potential biomarkers candidates for schizophrenia. Martins-de-Souza D, et al. J Psychiatr Res, 2010 May 14. PMID 20471030.

Redox proteomic analysis of carbonylated brain proteins in mild cognitive impairment and early Alzheimer's disease. Sultana R, et al. Antioxid Redox Signal, 2010 Mar. PMID 19686046.

De novo STXBP1 mutations in mental retardation and nonsyndromic epilepsy. Hamdan FF, et al. Ann Neurol, 2009 Jun. PMID 19557857.

Proteomic analysis reveals Hrs ubiquitin-interacting motif-mediated ubiquitin signaling in multiple cellular processes. Pridgeon JW, et al. FEBS J, 2009 Jan. PMID 19019082.

Syntaxin 1A interaction with the dopamine transporter promotes amphetamine-induced dopamine efflux. Binda F, et al. Mol Pharmacol, 2008 Oct. PMID 18617632.