

**Phospho-Ser515 Munc-18 Antibody**  
**Affinity purified rabbit polyclonal antibody**  
**Catalog # AN1116**

**Specification**

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**Phospho-Ser515 Munc-18 Antibody - Product Information**

Application	IHC, WB, FC
Primary Accession	<a href="#">Q62753</a>
Reactivity	Rat
Predicted	Bovine, Chicken, Human, Mouse, Monkey, Xenopus
Host	Rabbit
Clonality	polyclonal
Calculated MW	65 KDa

**Phospho-Ser515 Munc-18 Antibody - Additional Information**

Gene ID	81804
Gene Name	STXBP2
<b>Other Names</b>	
Syntaxin-binding protein 2, Protein unc-18 homolog 2, Munc18-2, Unc18-2, Protein unc-18 homolog B, Unc-18B, Stxbp2, Unc18b	

**Target/Specificity**

Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser515 conjugated to KLH.

**Dilution**

IHC~~ 1:400  
WB~~ 1:1000  
FC~~1:400

**Format**

Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephosphopeptide affinity columns.

**Antibody Specificity**

Specific for the ~65k Munc-18 protein phosphorylated at Ser515. Immunolabeling is blocked by the phosphopeptide used as antigen but not by the corresponding dephosphopeptide.

**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**

Phospho-Ser515 Munc-18 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**

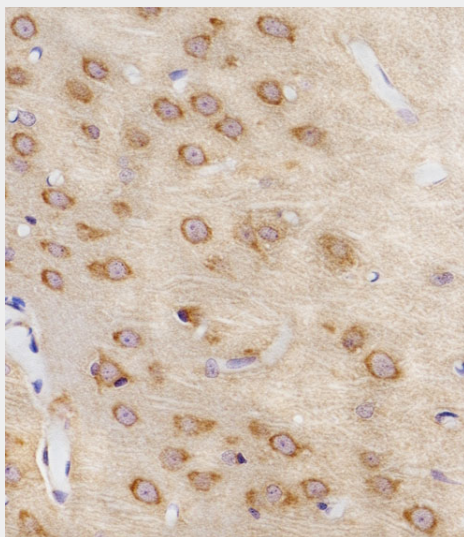
Blue Ice

## Phospho-Ser515 Munc-18 Antibody - Protocols

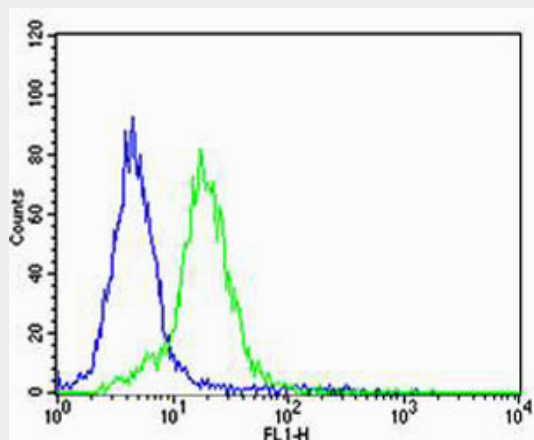
Provided below are standard protocols that you may find useful for product applications.

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

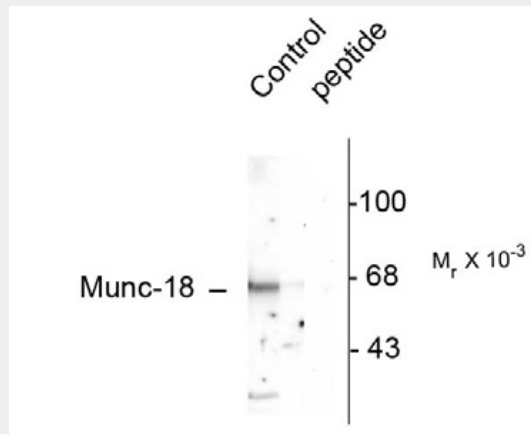
## Phospho-Ser515 Munc-18 Antibody - Images



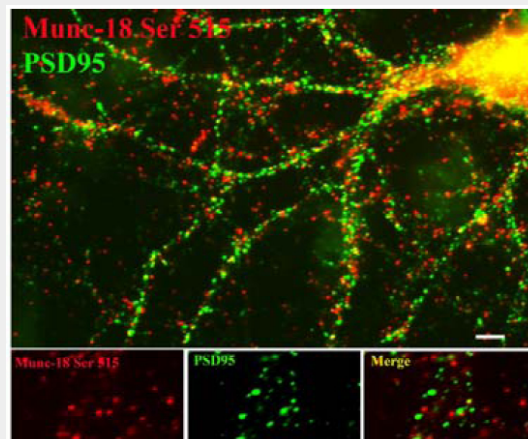
Immunohistochemical analysis of paraffin-embedded R. brain section using Phospho-Ser515 Munc-18 Antibody (Cat#AN1116). AN1116 was diluted at 1:400 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.



Flow cytometric analysis of Jurkat cells using Park7 (DJ-1) Antibody (green, Cat#AN1116) compared to an isotype control of rabbit IgG (blue). AN1116 was diluted at 1:400 dilution. An Alexa Fluor® 488 goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody.



Western blot of rat cortex lysate showing specific immunolabeling of the ~65k Munc-18 protein phosphorylated at Ser515. Immunolabeling is blocked by the phosphopeptide (peptide) used as antigen but not by the corresponding dephosphopeptide (not shown).



Immunostaining of 14 DIV cortical neurons showing specific labeling of Munc-18 phosphorylated at Ser515 (red) and PSD95 (green).

### Phospho-Ser515 Munc-18 Antibody - Background

Munc-18 (mammalian homologue of Unc-18) is a protein that is thought to be involved in regulating exocytosis due, at least in part, to its ability to bind syntaxin (Ciufo et al., 2005). Munc18-1 is a neuron-specific member of the Sec1/Munc18 protein family that binds to syntaxin1A and is thought to stabilize the complex (Liu et al., 2004). The function of Munc-18 is thought to be regulated by PKC phosphorylation of Ser515 on the Munc-18 protein (Sassa et al., 1996).

### Phospho-Ser515 Munc-18 Antibody - References

Ciufo LF, Barclay JW, Burgoyne RD, Morgan A (2005) Munc18-1 regulates early and late stages of exocytosis via syntaxin-independent protein interactions. *Mol Biol Cell* 16:470-482.

Liu J, Ernst SA, Gladysheva SE, Lee YY, Lentz SI, Ho CS, Li Q, Stuenkel EL (2004) Fluorescence resonance energy transfer reports properties of syntaxin1a interaction with Munc18-1 in vivo. *J Biol Chem* 279:55924-55936.

Sassa T, Ogawa H, Kimoto M, Hosono R (1996) The synaptic protein UNC-18 is phosphorylated by protein kinase C. *Neurochem Int* 29:543-552.

Sergio Leal-Ortiz, Clarissa L. Waites, Ryan Terry-Lorenzo, Pedro Zamorano, Eckart D. Gundelfinger, and Craig C. Garner (2008) Piccolo modulation of Synapsin1a dynamics regulates synaptic vesicle exocytosis. *J. Cell Biol.*, 181: 831 - 846.