

Datasheet: AHP1234

Description:	RABBIT ANTI MUNC-18 (pSer515)
Specificity:	MUNC-18 (pSer515)
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	0.1 ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			■	
Immunohistology - Frozen			■	
Immunohistology - Paraffin			■	
ELISA			■	
Immunoprecipitation			■	
Western Blotting	■			1/1000

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Rat
Species Cross Reactivity	Based on sequence similarity, is expected to react with: Dog, Xenopus, Human, Bovine, Chicken, Mouse, Primate N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
Antiserum Preparation	Antisera to rat Munc-18 (pSer515) were raised by repeated immunisations of rabbit with highly purified antigen. Purified IgG prepared by affinity chromatography.
Buffer Solution	10mM Hepes pH7.5
Preservative	0.09% Sodium Azide (NaN ₃)
Stabilisers	50% Glycerol 0.01% Bovine Serum Albumin
Immunogen	Phosphopeptide corresponding to amino acid sequence surrounding phosphorylated Ser515 of Munc-18.

**External Database
Links**

UniProt:

[P61765](#) [Related reagents](#)

Entrez Gene:

[25558](#) Stxbp1 [Related reagents](#)

Synonyms

Unc18a

RRID

AB_877490

Specificity

Rabbit anti Rat MUNC-18 (pSer515) antibody recognizes MUNC-18, also known as syntaxin-binding protein 1, N-Sec1, protein unc-18 homolog 1 (Unc18-1) and p67, when phosphorylated at serine 515. MUNC-18 is a ~67 kDa member of the STXBP/UNC-18/SEC1 family. It is neural specific, expressed in the brain, spinal cord and at very high levels in axons. Munc-18 is crucial to calcium-dependent neurotransmitter release, facilitating synaptic vesicle docking and fusion. It inhibits the formation of soluble N-ethylmaleimide-sensitive fusion protein attachment protein receptor (SNARE) complex by binding syntaxin 1 preventing the other components (synaptobrevin and synaptosomal associated protein of 25 kDa (SNAP-25)) from binding. The function of Munc-18 is regulated by the phosphorylation of serine 515 by protein kinase C.

Munc-18 is also involved in the onset of female puberty through its regulation of glutamate release ([Kim *et al.* 2006](#)).

Western Blotting

AHP1234 detects a band/s of approximately 65kDa in rat cortex cell lysates

References

1. Pevsner, J. *et al.* (1994) n-Sec1: a neural-specific syntaxin-binding protein. [Proc Natl Acad Sci U S A. 91 \(4\): 1445-9.](#)
2. Yerrapureddy, A. *et al.* (2005) Intracellular interaction between syntaxin and Munc 18-1 revealed by fluorescence resonance energy transfer. [Mol Membr Biol. 22 \(5\): 401-10.](#)

Further Reading

1. Toonen, R.F. *et al.* (2006) Munc18-1 expression levels control synapse recovery by regulating readily releasable pool size. [Proc Natl Acad Sci U S A. 103 \(48\): 18332-7.](#)

Storage

Store at +4°C or at -20°C if preferred.
Storage in frost-free freezers is not recommended.
This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

12 months from date of despatch

**Health And Safety
Information**

Material Safety Datasheet documentation #10088 available at:
10088: <https://www.bio-rad-antibodies.com/uploads/MSDS/10088.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)

Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)

Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)

Sheep Anti Rabbit IgG (STAR36...) [DyLight®488](#), [DyLight®680](#), [DyLight®800](#)

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