

## Datasheet: AHP1234

<b>Description:</b>	RABBIT ANTI MUNC-18 (pSer515)
<b>Specificity:</b>	MUNC-18 (pSer515)
<b>Format:</b>	Purified
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			■	
Immunohistology - Frozen			■	
Immunohistology - Paraffin			■	
ELISA			■	
Immunoprecipitation			■	
Western Blotting (1)	■			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.

**(1) For the detection of phosphoproteins, serine phosphatase inhibitors such as 10mM Sodium Fluoride should be added to the sample buffer. Milk or other casein-based blocking solutions are not recommended as casein is a phosphoprotein and its use can result in high background.**

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

<b>Immunogen</b>	Phosphopeptide corresponding to amino acid sequence surrounding phosphorylated Ser515 of Munc-18.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P61765</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">25558</a>    Stxbp1    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	Unc18a
<b>Specificity</b>	<p><b>Rabbit anti Rat MUNC-18 (pSer515) antibody</b> 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.</p> <p>Munc-18 is also involved in the onset of female puberty through its regulation of glutamate release (<a href="#">Kim et al. 2006</a>).</p>
<b>Western Blotting</b>	AHP1234 detects a band/s of approximately 65kDa in rat cortex cell lysates
<b>References</b>	<ol style="list-style-type: none"> <li>1. Pevsner, J. <i>et al.</i> (1994) n-Sec1: a neural-specific syntaxin-binding protein. <a href="#">Proc Natl Acad Sci U S A. 91 (4): 1445-9.</a></li> <li>2. Yerrapureddy, A. <i>et al.</i> (2005) Intracellular interaction between syntaxin and Munc 18-1 revealed by fluorescence resonance energy transfer. <a href="#">Mol Membr Biol. 22 (5): 401-10.</a></li> </ol>
<b>Further Reading</b>	1. Toonen, R.F. <i>et al.</i> (2006) Munc18-1 expression levels control synapse recovery by regulating readily releasable pool size. <a href="#">Proc Natl Acad Sci U S A. 103 (48): 18332-7.</a>
<b>Storage</b>	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>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.</p>
<b>Shelf Life</b>	12 months from date of despatch.
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10088 available at: 10088: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10088.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10088.pdf</a>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

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

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)  
Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)  
Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)  
Sheep Anti Rabbit IgG (2AB02...) [Biotin](#)  
Sheep Anti Rabbit IgG (STAR36...) [DyLight®488](#), [DyLight®549](#), [DyLight®649](#),  
[DyLight®680](#), [DyLight®800](#)

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