Synaptic Systems

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Munc18-1

Cat.No. 116 011; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg purified IgG, lyophilized. For reconstitution add 100 µl H_2O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	**WB**: 1 : 1000 up to 1 : 5000 (AP staining) (see remarks) **IP**: yes **ICC**: 1 : 1000 **IHC**: not recommended **IHC-P/FFPE**: not recommended **ELISA**: yes (see remarks)
Clone	131.1
Subtype	IgG2a (κ light chain)
Immunogen	Recombinant protein corresponding to AA 1 to 594 from rat Munc18-1 (UniProt Id: P61765)
Reactivity	Reacts with: rat (P61765), mouse (O08599). Other species not tested yet.
Specificity	Specific for munc 18-1 with a minor cross-reactivity to munc 18-2.
Remarks	**WB**: This antibody detects two smaller bands (possible degradation products) of unkown identity. **ELISA**: Suitable as capture antibody for sandwich-ELISA with cat. no. 116 002 as detector antibody (protocol for sandwich-ELISA).

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Munc 18 is an abundant neuronal protein that tightly binds to the synaptic fusion protein syntaxin 1. It is highly homologous to the C. elegans unc-18 gene product, and weakly related to the yeast sec1, sly1, and slp1 genes.
There are three munc 18 isoforms in mammals. **Munc 18-1** or 18a, also referred to as **rb-sec1**, **n-sec1**, **stxbp1** and **p67**, is primarily expressed in neurons. **Munc 18-2** or 18b, also referred to as **stxbp2**, and Munc 18-3 or 18c are expressed ubiquitously.

Selected References SYSY Antibodies

The effects of antidepressant treatment in prenatally stressed rats support the glutamatergic hypothesis of stress-related disorders.
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de Jong AP, Schmitz SK, Toonen RF, Verhage M
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Small-scale isolation of synaptic vesicles from mammalian brain.
Ahmed S, Holt M, Riedel D, Jahn R
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Endosomal sorting of readily releasable synaptic vesicles.
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