Store at -20C

#8474

Munc18-1 Antibody

Cell Signaling
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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R	Endogenous	70	Rabbit	#P61764	6812

Product Usage Information

Application	Dilution
Western Blotting	1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Munc18-1 Antibody recognizes endogenous levels of total Munc18-1 protein.

Species predicted to react based on 100% sequence homology

Monkey

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near Asp453 of human Munc18-1 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Munc18-1 belongs to the Munc18 protein family that also includes Munc18-2 and Munc18-3. These proteins are highly conserved at the amino acid sequence level and play a critical role in membrane fusion. Munc18 proteins control SNARE complex formation (1,2) and interact with syntaxin (3). In Munc18-1 knockout mice, neurotransmitter release is completely abolished (4). In addition, Munc18-1 acts as a molecular chaperone for syntaxin-1, allowing for formation of the SNARE complex at the plasma membrane (5). Munc18-1 also acts as a regulator of vesicle docking during exocytosis (6).

Background References

1. Rizo, J. and Südhof, T.C. (2002) *Nat Rev Neurosci* 3, 641-53.
2. Südhof, T.C. and Rothman, J.E. (2009) *Science* 323, 474-7.
3. Han, G.A. et al. (2010) *J Neurochem* 115, 1-10.
4. Verhage, M. et al. (2000) *Science* 287, 864-9.
5. Medine, C.N. et al. (2007) *J Cell Sci* 120, 4407-15.
6. Voets, T. et al. (2001) *Neuron* 31, 581-91.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat

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