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SNAP23 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant SNAP23.
Catalog # AT3971a

Product Information

Application	WB, IHC, IP, E
Primary Accession	O00161
Other Accession	BC000148
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	2F5-3D4
Calculated MW	23354

Additional Information

Gene ID	8773
Other Names	Synaptosomal-associated protein 23, SNAP-23, Vesicle-membrane fusion protein SNAP-23, SNAP23
Target/Specificity	SNAP23 (AAH00148, 1 a.a. ~ 211 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 IP~~N/A E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	SNAP23 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

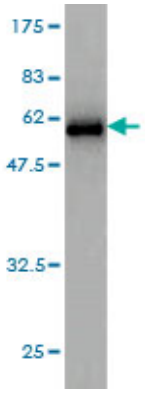
Specificity of vesicular transport is regulated, in part, by the interaction of a vesicle-associated membrane protein termed synaptobrevin/VAMP with a target compartment membrane protein termed syntaxin. These proteins, together with SNAP25 (synaptosome-associated protein of 25 kDa), form a complex which serves as a binding site for the general membrane fusion machinery. Synaptobrevin/VAMP and syntaxin are believed to be involved in vesicular transport in most, if not all cells, while SNAP25 is present almost exclusively in the brain, suggesting that a ubiquitously expressed homolog of SNAP25 exists to facilitate transport vesicle/target membrane fusion in other tissues. The protein encoded by this gene is structurally and functionally similar to SNAP25 and binds tightly to multiple syntaxins and synaptobrevins/VAMPs. It is an essential component of the high affinity receptor for the general membrane fusion machinery and is an important regulator of transport vesicle docking and fusion. Two alternative transcript variants encoding

different protein isoforms have been described for this gene.

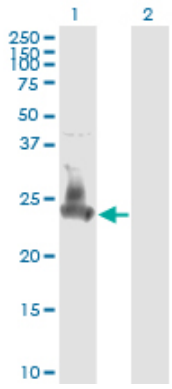
References

The SNARE protein SNAP23 and the SNARE-interacting protein Munc18c in human skeletal muscle are implicated in insulin resistance/type 2 diabetes. Bostr?m P, et al. Diabetes, 2010 Aug. PMID 20460426.Identification of type 2 diabetes-associated combination of SNPs using support vector machine. Ban HJ, et al. BMC Genet, 2010 Apr 23. PMID 20416077.VAMP3, syntaxin-13 and SNAP23 are involved in secretion of matrix metalloproteinases, degradation of the extracellular matrix and cell invasion. Kean MJ, et al. J Cell Sci, 2009 Nov 15. PMID 19910495.Identification of new putative susceptibility genes for several psychiatric disorders by association analysis of regulatory and non-synonymous SNPs of 306 genes involved in neurotransmission and neurodevelopment. Gratac?s M, et al. Am J Med Genet B Neuropsychiatr Genet, 2009 Sep 5. PMID 19086053.Effect of dominant negative SNAP-23 expression on platelet function. Gillitzer A, et al. J Thromb Haemost, 2008 Oct. PMID 18665925.

Images

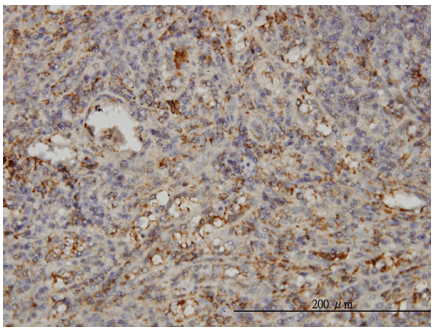


Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (48.95 KDa) .



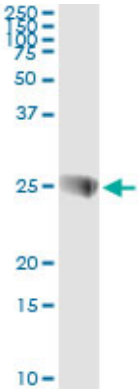
Western Blot analysis of SNAP23 expression in transfected 293T cell line by SNAP23 monoclonal antibody (M01), clone 2F5-3D4.

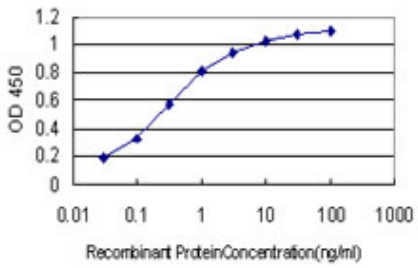
Lane 1: SNAP23 transfected lysate (Predicted MW: 23.4 KDa).
Lane 2: Non-transfected lysate.



Immunoperoxidase of monoclonal antibody to SNAP23 on formalin-fixed paraffin-embedded human spleen. [antibody concentration 3 ug/ml]

Immunoprecipitation of SNAP23 transfected lysate using anti-SNAP23 monoclonal antibody and Protein A Magnetic Bead (U0007), and immunoblotted with SNAP23 MaxPab rabbit polyclonal antibody.





Detection limit for recombinant GST tagged SNAP23 is approximately 0.03ng/ml as a capture antibody.