

## SYT1 Antibody (monoclonal) (M05)

Mouse monoclonal antibody raised against a full length recombinant SYT1.

Catalog # AT4126a

### Product Information

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<b>Application</b>	WB, IHC, E
<b>Primary Accession</b>	<a href="#">P21579</a>
<b>Other Accession</b>	<a href="#">BC058917</a>
<b>Reactivity</b>	Human
<b>Host</b>	mouse
<b>Clonality</b>	monoclonal
<b>Isotype</b>	IgG2a Kappa
<b>Clone Names</b>	1A6
<b>Calculated MW</b>	47573

### Additional Information

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<b>Gene ID</b>	6857
<b>Other Names</b>	Synaptotagmin-1, Synaptotagmin I, SytI, p65, SYT1, SVP65, SYT
<b>Target/Specificity</b>	SYT1 (AAH58917, 1 a.a. ~ 422 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
<b>Dilution</b>	WB~~1:500~1000 IHC~~1:100~500 E~~N/A
<b>Format</b>	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
<b>Storage</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
<b>Precautions</b>	SYT1 Antibody (monoclonal) (M05) is for research use only and not for use in diagnostic or therapeutic procedures.

### Background

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The synaptotagmins are integral membrane proteins of synaptic vesicles thought to serve as Ca(2+) sensors in the process of vesicular trafficking and exocytosis. Calcium binding to synaptotagmin-1 participates in triggering neurotransmitter release at the synapse (Fernandez-Chacon et al., 2001 [PubMed 11242035]).

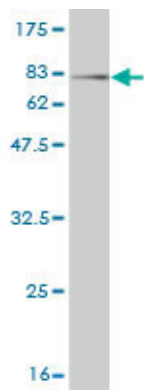
### References

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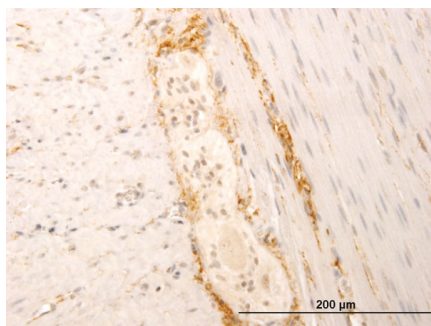
Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614. A meta-analysis of genome-wide data from five European isolates reveals an association of COL22A1, SYT1, and GABRR2 with serum creatinine level. Pattaro C, et al. BMC Med Genet, 2010 Mar 11. PMID 20222955. Cyclic AMP-mediated endocytosis of intestinal

epithelial NHE3 requires binding to synaptotagmin 1. Musch MW, et al. Am J Physiol Gastrointest Liver Physiol, 2010 Feb. PMID 19926819. NMR characterization of copper and lipid interactions of the C2B domain of synaptotagmin I-relevance to the non-classical secretion of the human acidic fibroblast growth factor (hFGF-1). Kathir KM, et al. Biochim Biophys Acta, 2010 Feb. PMID 19835837. De novo STXBP1 mutations in mental retardation and nonsyndromic epilepsy. Hamdan FF, et al. Ann Neurol, 2009 Jun. PMID 19557857.

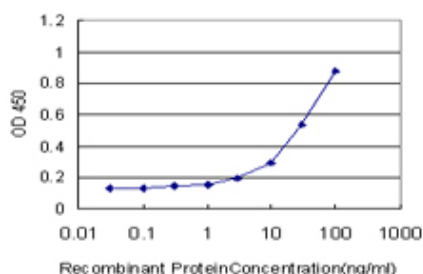
## Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (72.16 kDa) .



Immunoperoxidase of monoclonal antibody to SYT1 on formalin-fixed paraffin-embedded human smooth muscle. [antibody concentration 1.5 ug/ml]



Detection limit for recombinant GST tagged SYT1 is approximately 1 ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.