10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SYT1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full-length recombinant SYT1.
Catalog # AT4125a

Product Information

Application	WB, IF, E
Primary Accession	P21579
Other Accession	BC058917
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	3A5
Calculated MW	47573

Additional Information

Gene ID	6857
Other Names	Synaptotagmin-1, Synaptotagmin I, SytI, p65, SYT1, SVP65, SYT
Target/Specificity	SYT1 (AAH58917, 1 a.a. ~ 422 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 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	SYT1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

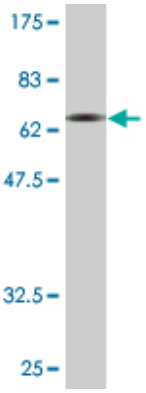
The synaptotagmins are integral membrane proteins of synaptic vesicles thought to serve as Ca(2+) sensors in the process of vesicular trafficking and exocytosis. Calcium binding to synaptotagmin-1 participates in triggering neurotransmitter release at the synapse (Fernandez-Chacon et al., 2001 [PubMed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

References

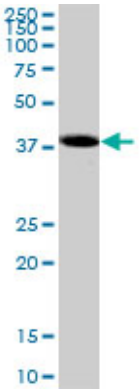
Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.A meta-analysis of genome-wide data from five European isolates reveals an association of COL22A1, SYT1, and GABRR2 with serum creatinine 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.

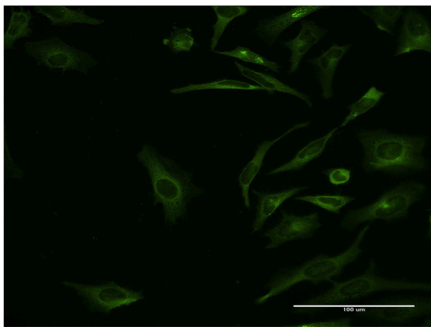
Images



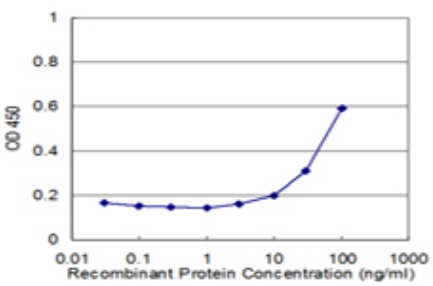
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (72.16 KDa) .



SYT1 monoclonal antibody (M01), clone 3A5. Western Blot analysis of SYT1 expression in Jurkat ((Cat # AT4125a)



Immunofluorescence of monoclonal antibody to SYT1 on HeLa cell . [antibody concentration 10 ug/ml]



Detection limit for recombinant GST tagged SYT1 is approximately 3ng/ml as a capture antibody.

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