

SYT1 Antibody (monoclonal) (M01)

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

Catalog # AT4125a

Specification

SYT1 Antibody (monoclonal) (M01) - Product Information

| | |
|-------------------|--------------------------|
| Application | IF, WB, E |
| Primary Accession | P21579 |
| Other Accession | BC058917 |
| Reactivity | Human |
| Host | mouse |
| Clonality | Monoclonal |
| Isotype | IgG2a Kappa |
| Calculated MW | 47573 |

SYT1 Antibody (monoclonal) (M01) - 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

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.

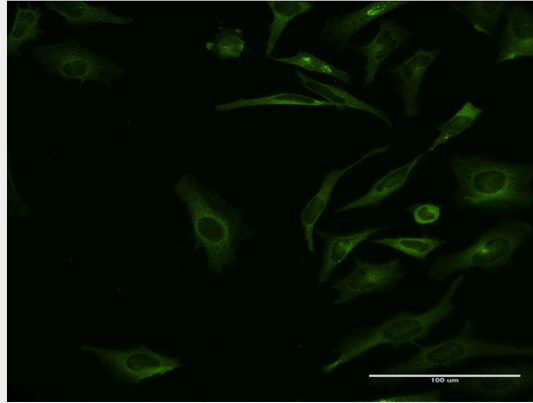
SYT1 Antibody (monoclonal) (M01) - Protocols

Provided below are standard protocols that you may find useful for product applications.

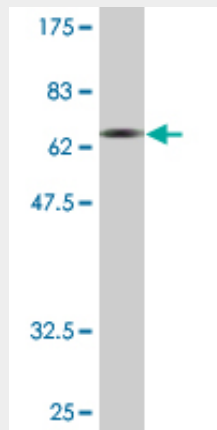
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

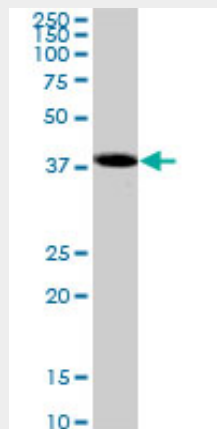
SYT1 Antibody (monoclonal) (M01) - Images



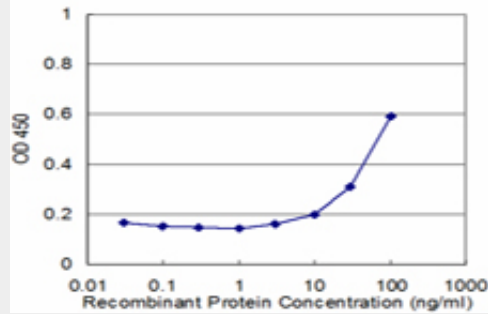
Immunofluorescence of monoclonal antibody to SYT1 on HeLa cell . [antibody concentration 10 ug/ml]



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)



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

SYT1 Antibody (monoclonal) (M01) - Background

The synaptotagmins are integral membrane proteins of synaptic vesicles thought to serve as Ca²⁺ 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]).

SYT1 Antibody (monoclonal) (M01) - 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.