Immunotag™ Synaptotagmin 1 Monoclonal Antibody

Antibody Specification

Catalog No.	ITM0605
Product Description	Immunotag™ Synaptotagmin 1 Monoclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	Synaptotagmin 1
Clonality	Monoclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human
Host Species	Mouse
Immunogen	Purified recombinant fragment of Synaptotagmin 1 expressed in E. Coli.
Specificity	Synaptotagmin 1 Monoclonal Antibody detects endogenous levels of Synaptotagmin 1 protein.
Purification	Affinity purification
Form	Ascitic fluid containing 0.03% sodium azide.
Gene Name	SYT1
Accession No.	P21579 P46096
Alternate Names	SYT1; SVP65; SYT; Synaptotagmin-1; Synaptotagmin I; SytI; p65
Description	synaptotagmin 1(SYT1) Homo sapiens 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]).[supplied by OMIM, Jul 2010],

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Protein Expression	Amygdala,Brain,Hippocampus,PNS,
Subcellular Localization	Golgi apparatus,plasma membrane,synaptic vesicle,integral component of membrane,cell junction,synaptic vesicle membrane,dense core granule,SNARE complex,chromaffin granule membrane,presynaptic membrane,neuron projection,terminal bouton,
Protein Function	cofactor:Binds 3 calcium ions per subunit. The ions are bound to the C2 domains.,domain:The first C2 domain mediates Ca(2+)-dependent phospholipid binding.,domain:The second C2 domain mediates interaction with SV2A and STN2.,function:May have a regulatory role in the membrane interactions during trafficking of synaptic vesicles at the active zone of the synapse. It binds acidic phospholipids with a specificity that requires the presence of both an acidic head group and a diacyl backbone. A Ca(2+)-dependent interaction between synaptotagmin and putative receptors for activated protein kinase C has also been reported. It can bind to at least three additional proteins in a Ca(2+)-independent manner; these are neurexins, syntaxin and AP2.,similarity:Belongs to the synaptotagmin family.,similarity:Contains 2 C2 domains.,subcellular location:Synaptic vesicles and chromaffin granules.,subunit:Homotetramer (Probable). Interacts with SCAMP5, STN2, SV2A, SV2B, SV2C and RIMS1. Forms a complex with SV2B, syntaxin 1 and SNAP25.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.