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SYT3 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57381

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q9BQG1
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	63304
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human synaptotagmin-3
Epitope Specificity	451-550/590
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane; Single-pass membrane protein.
SIMILARITY	Belongs to the synaptotagmin family. Contains 2 C2 domains.
SUBUNIT	Homodimer. Can also form heterodimers with SYT6.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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 participates in triggering neurotransmitter release at the synapse. The first C2 domain mediates Ca(2+)-dependent phospholipid binding. The second C2 domain mediates interaction with Stonin 2. Synaptotagmin 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.

Additional Information

Gene ID	84258
Other Names	Synaptotagmin-3, Synaptotagmin III, SytIII, SYT3
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	SYT3
Function	Ca(2+) sensor involved in Ca(2+)-dependent exocytosis of secretory vesicles through Ca(2+) and phospholipid binding to the C2 domain. Ca(2+) induces binding of the C2-domains to phospholipid membranes and to assembled SNARE-complexes; both actions contribute to triggering exocytosis (By similarity). Plays a role in dendrite formation by melanocytes (PubMed:23999003).
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:P40748}; Single-pass membrane protein. Cytoplasmic vesicle, secretory vesicle membrane; Single-pass membrane protein
Tissue Location	Expressed in melanocytes (PubMed:23999003).