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

SYT3 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57381

Specification

SYT3 Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, E**
Primary Accession	Q9BQG1
Reactivity	**Rat, Pig, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**63 KDa**
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.

SYT3 Polyclonal Antibody - Additional Information

Gene ID 84258

Other Names

Synaptotagmin-3, Synaptotagmin III, SytIII, SYT3

Dilution
WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>E~~N/A

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ 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 ℃.

SYT3 Polyclonal Antibody - 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).

SYT3 Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SYT3 Polyclonal Antibody - Images