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

Synaptotagmin-14 Rabbit pAb

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Catalog # AP54620

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q8NB59
Predicted	Human, Mouse, Rat, Chicken, Pig, Horse, Rabbit, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	62287
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Synaptotagmin-14
Epitope Specificity	477-555/555
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	Membrane; Single-pass type III membraneprotein. Note=Localized in perinuclear and submembranous regions.
SIMILARITY	Belongs to the synaptotagmin family. Contains 2 C2 domains.
SUBUNIT	Homodimer. Can also form heterodimers
DISEASE	Defects in SYT14 are the cause of spinocerebellar ataxiaautosomal recessive type 11 (SCAR11) [MIM:614229]. Spinocerebellarataxia is a clinically and genetically heterogeneous group ofcerebellar disorders. Patients show progressive incoordination ofgait and often poor coordination of hands, speech and eyemovements, due to degeneration of the cerebellum with variableinvolvement of the brainstem and spinal cord. SCAR11 is associatedwith psychomotor retardation.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Synaptotagmins are a large gene family of synaptic vesicle type III integral membrane proteins that function as regulators of both exocytosis and endocytosis and are involved in neurotransmitter secretion from small secretory vesicles. Synaptotagmin XIV, also known as SytXIV, is a 555 amino acid single-pass type III membrane protein belonging to the Synaptotagmin family. With the ability to form heterodimers, Synaptotagmin XIV mainly exists as a homodimer and contains two C2 domains, an N-terminal transmembrane domain and a putative fatty-acylation site. Synaptotagmin XIV is Ca2+-independent and may function in the trafficking and exocytosis of secretory vesicles to tissues outside the brain. Disruption of Synaptotagmin XIV may be affiliated with neurodevelopmental abnormalities. Synaptotagmin XIV exists as six alternatively spliced isoforms and is encoded by a gene on human chromosome 1q32.2.

Additional Information

Gene ID	255928
Other Names	Synaptotagmin-14, Synaptotagmin XIV, SytXIV, SYT14
Target/Specificity	Highly expressed in fetal and adult braintissue.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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	SYT14
Function	May be involved in the trafficking and exocytosis of secretory vesicles in non-neuronal tissues. Is Ca(2+)-independent.
Cellular Location	Membrane; Single- pass type III membrane protein Note=Localized in perinuclear and submembranous regions
Tissue Location	Highly expressed in fetal and adult brain tissue.

Background

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