

**Synaptotagmin-14 Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP54620**

**Specification**

**Synaptotagmin-14 Polyclonal Antibody - Product Information**

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	<a href="#">Q8NB59</a>
Reactivity	Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	62 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Synaptotagmin-14
Epitope Specificity	477-555/555
Isotype	IgG
<b>Purity</b>	
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. Belongs to the synaptotagmin family. Contains 2 C2 domains.
SIMILARITY	Homodimer. Can also form heterodimers
SUBUNIT	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.
DISEASE	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Important Note	

**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 Ca<sup>2+</sup>-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.

### Synaptotagmin-14 Polyclonal Antibody - Additional Information

**Gene ID** 255928

#### Other Names

Synaptotagmin-14, Synaptotagmin XIV, SytXIV, SYT14

#### Target/Specificity

Highly expressed in fetal and adult brain tissue.

#### Dilution

<span class="dilution\_WB">WB~~1:1000</span><br \><span class="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class="dilution\_IHC-F">IHC-F~~N/A</span><br \><span class="dilution\_IF">IF~~1:50~200</span><br \><span class="dilution\_ICC">ICC~~N/A</span><br \><span class="dilution\_E">E~~N/A</span>

#### Format

0.01M TBS(pH7.4), 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.

### Synaptotagmin-14 Polyclonal Antibody - 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.

### Synaptotagmin-14 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 Cytometry](#)
- [Cell Culture](#)

### **Synaptotagmin-14 Polyclonal Antibody - Images**