



## Rabbit Anti-Munc13 antibody

SL11353R

<b>Product Name:</b>	Munc13
<b>Chinese Name:</b>	神经突触前膜胞内蛋白13抗体
<b>Alias:</b>	Munc 13; KIAA1032; Munc13-1; Protein unc-13 homolog A; UN13A; Unc 13 homolog A; Unc13a; UNC13A; Unc13h1; UN13A_HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Sheep,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	193kDa
<b>Cellular localization:</b>	cytoplasmicThe cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human Munc13 :1511-1610/1703
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	Munc 13s are homologues of the C. elegans unc-13 gene product. Three brain specific isoforms are expressed in rat: Munc 13-1, -13-2, and -13-3. Munc 13-1 is a peripheral membrane protein that is enriched in synaptosomes and localized to plasma membranes but absent from synaptic vesicles. It has multiple regulatory domains (C1 and C2 domains) that may mediate diacylglycerol, phospholipid, and calcium binding. The C terminus of Munc 13-1 interacts directly with a putative coiled coil domain in the N-

terminal part of syntaxin. It has been shown that Munc 13 is involved in priming synaptic vesicles. These activated vesicles can be released immediately on Ca<sup>2+</sup> influx.

**Function:**

Plays a role in vesicle maturation during exocytosis as a target of the diacylglycerol second messenger pathway. Involved in neurotransmitter release by acting in synaptic vesicle priming prior to vesicle fusion and participates in the activity-dependent refilling of readily releasable vesicle pool (RRP). Essential for synaptic vesicle maturation in most excitatory/glutamatergic but not inhibitory/GABA-mediated synapses (By similarity). Also involved in secretory granule priming in insulin secretion (By similarity). Interacts with FBXO45 (via SRY domain); leading to the degradation of UNC13A by the proteasome (By similarity).

**Subunit:**

Interacts with the N-termini of STX1A and/or STX1B1 and DOC2A. Interacts with BSN. Interacts with RIMS1 which recruits UNC13A to the active zone. Forms homodimers via its first C2 domain. Also interacts via this domain with the zinc finger domain of RIMS2. Part of a complex consisting of ERC2, RIMS1 and UNC13A. Also part of a complex consisting of UNC13A, RIMS2 and RAB3A (By similarity).

**Subcellular Location:**

Cytoplasm. Cell membrane; Peripheral membrane protein. Cell junction; synapse, presynaptic cell membrane. Note: Localized to the active zone of presynaptic density. Translocated to the plasma membrane as response to phorbol ester binding

**Tissue Specificity:**

Expressed in pancreatic islet cells.

**Similarity:**

Belongs to the unc-13 family.

Contains 3 C2 domains.

Contains 1 MHD1 (MUNC13 homology domain 1) domain.

Contains 1 MHD2 (MUNC13 homology domain 2) domain.

Contains 1 phorbol-ester/DAG-type zinc finger.

**SWISS:**

Q9UPW8

**Gene ID:**

23025

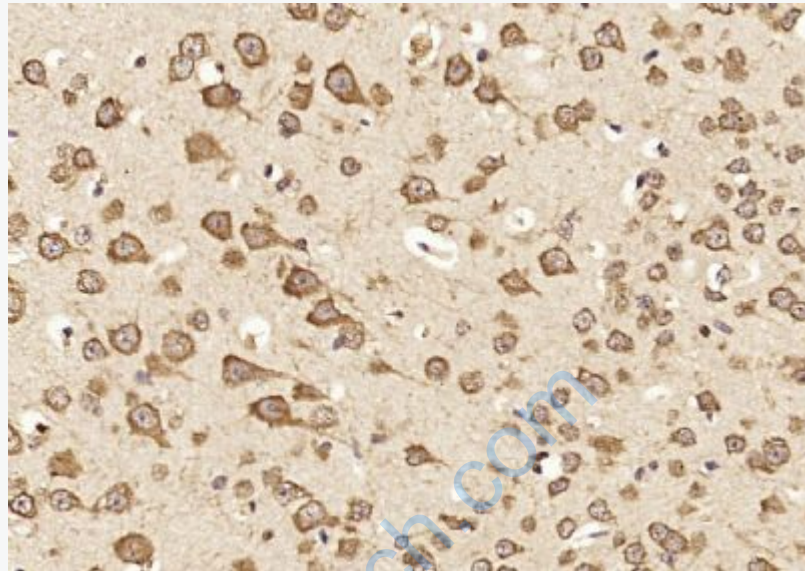
**Database links:**

UniProtKB/Swiss-Prot: Q9UPW8.4

**Important Note:**

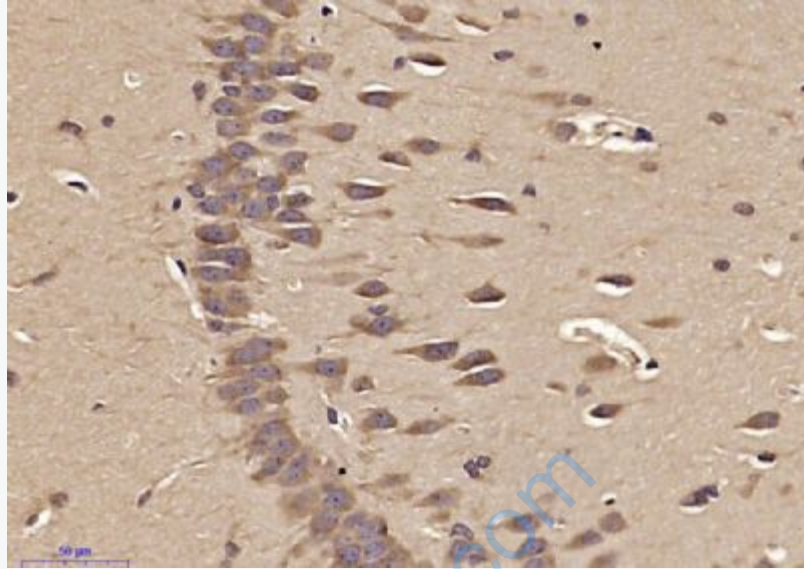
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therapeutic or diagnostic applications.



**Picture:**

Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by microwave in sodium citrate buffer (pH6.0) ; Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes; Blocking buffer (3% BSA) at RT for 30min; Antibody incubation with (Munc13) Polyclonal Antibody, Unconjugated (SL11353R) at 1:400 overnight at 4°C, followed by conjugation to the secondary antibody (labeled with HRP) and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by microwave in sodium citrate buffer (pH6.0) ; Block endogenous peroxidase by 3% hydrogen peroxide for 30 minutes; Blocking buffer (3% BSA) at RT for 30min; Antibody incubation with (Munc13) Polyclonal Antibody, Unconjugated (SL11353R) at 1:400 overnight at 4°C, followed by conjugation to the secondary antibody (labeled with HRP) and DAB staining.