

Munc13 Rabbit pAb

Munc13 Rabbit pAb Catalog # AP54468

Product Information

Application IHC-P, IHC-F, IF

Primary Accession Q2TAK8

Reactivity Pig, Mouse, Chicken, Dog

Rabbit Host **Polyclonal** Clonality 78636 Calculated MW **Physical State** Liquid

KLH conjugated synthetic peptide derived from human Munc13 **Immunogen**

Epitope Specificity 1511-1610/1703

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 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

Belongs to the unc-13 family. Contains 3 C2 domains. Contains 1 MHD1 **SIMILARITY**

(MUNC13 homology domain 1) domain. Contains 1 MHD2 (MUNC13

homology domain 2) domain. Contains 1 phorbol-ester/DAG-type zinc finger. **SUBUNIT** nteracts 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).

Post-translational modifications **Important Note**

Phosphorylated upon DNA damage, probably by ATM or ATR.

This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions

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 Ca2+ influx.

Additional Information

Gene ID 84939

Other Names PWWP domain-containing DNA repair factor 3A, PWWP3A, Mutated

melanoma-associated antigen 1, MUM-1, PWWP domain-containing protein

MUM1, Protein expandere, PWWP3A (HGNC:29641)

Target/Specificity Expressed in pancreatic islet cells.

Dilution IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

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 PWWP3A (HGNC:29641)

Function Involved in the DNA damage response pathway by contributing to the

maintenance of chromatin architecture. Recruited to the vicinity of DNA breaks by TP53BP1 and plays an accessory role to facilitate damage-induced chromatin changes and promoting chromatin relaxation. Required for

efficient DNA repair and cell survival following DNA damage.

Cellular Location Nucleus. Note=Recruited to DNA damage sites via its interaction with the

BRCT domain of TP53BP1

Background

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 Ca2+ influx.

Images



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 (AP54468) at 1:400 overnight at 4°C, followed by conjugation to the secondary antibody (labeled with HRP)and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.