

# Munc13 Rabbit pAb

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Catalog # AP54468

## Product Information

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| <b>Application</b>                      | IHC-P, IHC-F, IF   |
| <b>Primary Accession</b>                | <a href="#">Q2TAK8</a>   |
| <b>Reactivity</b>                       | Mouse, Rat   |
| <b>Predicted</b>                        | Human, Chicken, Dog, Pig, Sheep  |
| <b>Host</b>                             | Rabbit   |
| <b>Clonality</b>                        | Polyclonal   |
| <b>Calculated MW</b>                    | 78636  |
| <b>Physical State</b>                   | Liquid   |
| <b>Immunogen</b>                        | KLH conjugated synthetic peptide derived from human Munc13   |
| <b>Epitope Specificity</b>              | 1511-1610/1703   |
| <b>Isotype</b>                          | IgG  |
| <b>Purity</b>                           | affinity purified by Protein A   |
| <b>Buffer</b>                           | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.  |
| <b>SUBCELLULAR LOCATION</b>             | 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  |
| <b>SIMILARITY</b>                       | 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.  |
| <b>SUBUNIT</b>                          | 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).   |
| <b>Post-translational modifications</b> | Phosphorylated upon DNA damage, probably by ATM or ATR.  |
| <b>Important Note</b>                   | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.  |
| <b>Background Descriptions</b>          | Munc 13s are homologues of the <i>C. elegans</i> 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. |

## Additional Information

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|--------------------|--|
| 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 ( <a href="#">HGNC:29641</a> ) |
| 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.  |

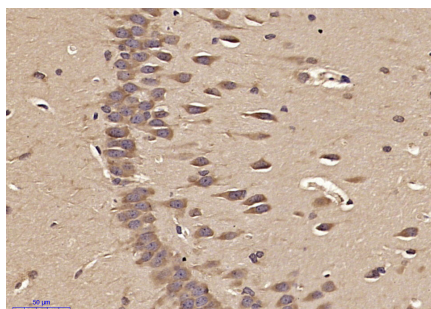
## Protein Information

|                   |   |
|-------------------|---|
| Name              | PWWP3A ( <a href="#">HGNC:29641</a> )   |
| 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

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## 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.