

### **UNC13B Antibody (N-term) Blocking Peptide**

Synthetic peptide Catalog # BP13116a

### **Specification**

### **UNC13B Antibody (N-term) Blocking Peptide - Product Information**

**Primary Accession** 

014795

# UNC13B Antibody (N-term) Blocking Peptide - Additional Information

**Gene ID 10497** 

#### **Other Names**

Protein unc-13 homolog B, Munc13-2, munc13, UNC13B, UNC13

### **Target/Specificity**

The synthetic peptide sequence used to generate the antibody AP13116a was selected from the N-term region of UNC13B. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

# **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

## **UNC13B Antibody (N-term) Blocking Peptide - Protein Information**

Name UNC13B (<u>HGNC:12566</u>)

**Synonyms** UNC13

## **Function**

Plays a role in vesicle maturation during exocytosis as a target of the diacylglycerol second messenger pathway. Is involved in neurotransmitter release by acting in synaptic vesicle priming prior to vesicle fusion and participates in the activity-depending refilling of readily releasable vesicle pool (RRP) (By similarity). Essential for synaptic vesicle maturation in a subset of excitatory/glutamatergic but not inhibitory/GABA-mediated synapses (By similarity). In collaboration with UNC13A, facilitates neuronal dense core vesicles fusion as well as controls the location and efficiency of their synaptic release (By similarity).

#### **Cellular Location**

Cytoplasm. Membrane; Peripheral membrane protein. Cell membrane Synapse. Note=Localized to synapses. Translocated to the plasma membrane in response to phorbol ester binding (By



similarity)

#### **Tissue Location**

Expressed in kidney cortical epithelial cells and brain.

## **UNC13B Antibody (N-term) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

#### Blocking Peptides

**UNC13B Antibody (N-term) Blocking Peptide - Images** 

### UNC13B Antibody (N-term) Blocking Peptide - Background

This gene is expressed in the kidney cortical epithelialcells and is upregulated by hyperglycemia. The encoded proteinshares a high level of similarity to the rat homolog, and contains C2 domains and a diacylglycerol-binding C1 domain. Hyperglycemiaincreases the levels of diacylglycerol, which has been shown toinduce apoptosis in cells transfected with this gene and thuscontribute to the renal cell complications of hyperglycemia. Studies in other species also indicate a role for this protein inthe priming step of synaptic vesicle exocytosis. [provided byRefSeq].

## UNC13B Antibody (N-term) Blocking Peptide - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Goldenberg, N.M., et al. Am. J. Physiol., Cell Physiol. 297 (4), C1053-C1058 (2009) :Dimova, K., et al. Biochemistry 48(25):5908-5921(2009)Tregouet, D.A., et al. Diabetes 57(10):2843-2850(2008)Speight, P., et al. Traffic 6(10):858-865(2005)