

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human UNC13B in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) UNC13A and rhUNC13C is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 584102
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. Coli</i> -derived recombinant human UNC13B Asp418-Ser1591 Accession # O14795
<b>Conjugate</b>	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
<b>Formulation</b>	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

**Immunohistochemistry** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

## BACKGROUND

UNC13B is a 170 kDa member of the unc13 family. It is 1591 amino acids (aa) in length and contains three C2 domains, one MHD1 domain, one MHD2 domain, and one phorbol-ester/DAG-type zinc finger. Human UNC13B is 95% and 93% aa identical to mouse and rat UNC13B, respectively. UNC13B is expressed in brain and kidney cortical epithelial and mesangial cells. UNC13B plays a role in vesicle maturation during exocytosis as a target of the diacylglycerol second messenger pathway. It is 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). In addition, UNC13B may be involved in mediating some of the acute and chronic changes in mesangial cells produced by exposure to hyperglycemia

## PRODUCT SPECIFIC NOTICES

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