

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human UNC13B in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) UNC13A and rhUNC13C is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 584102
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. Coli</i> -derived recombinant human UNC13B Asp418-Ser1591 Accession # O14795
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	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

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