

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 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 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

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc., and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.