

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human ADAM10 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 172023
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Spodoptera frugiperda, Sf 21 (baculovirus)-derived human ADAM10 protein Thr214-Glu672, with a C-terminal 10-His tag Accession # O14672
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 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.

ELISA 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

ADAM10 (also known as Kuzbanian, mammalian disintegrin metalloprotease, myelin-associated metalloproteinase) is a member of the ADAM family that contains a disintegrin and metalloprotease-like domain (1, 2). Like other membrane-anchored ADAMs, ADAM10 consists of the following domains, pro with a cysteine switch and furin cleavage sequence, catalytic with the zinc-binding site and Met-turn expected for reprolysins, disintegrin-like, cysteine-rich, EGF-like, transmembrane, and cytoplasmic. ADAM10 is highly conserved, with 97% amino acid identity between mouse, rat, bovine and human and 45% identity between mouse and *Drosophila*. The active enzyme processes notch, notch ligand delta, and amyloid protein precursor at the alpha site, playing an important role in neurogenesis (3, 4). It also processes the 26 kDa membrane-anchored pro-tumor necrosis factor-α (TNF-α) to the 17 kDa mature TNF-α (5). It cleaves myelin basic protein and type IV collagen (6, 7). ADAM10 is widely expressed in tissues and resides both on the cell surface and in the cell (8, 9).

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.