

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Teneurin-1 in direct ELISAs and Western blots. In direct ELISAs, approximately 15% cross-reactivity with recombinant human Teneurin-3 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Teneurin-1 Met1-Lys317 Accession # AAF04723
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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.

Western Blot 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

Teneurin-1 (also Ten-m1, tenascin-M1, and Ten-m/Odz1) is a 250-300 kDa member of the tenascin family, teneurin subfamily of transmembrane (TM) molecules. It is a covalently-linked homodimer that is expressed in both embryonic and adult neurons, among which are cerebellar granule cells and CA2 pyramidal hippocampal neurons. Teneurin 1 appears to promote neurite outgrowth and mediate cell-to-cell adhesion via homophilic interactions. Human Teneurin-1 is a 2725 amino acid (aa) type II TM glycoprotein. It contains a 324 aa cytoplasmic region (aa 1-324) that contains an NLS (aa 62-65), plus a 2380 aa extracellular domain (ECD). The ECD possesses eight sequential EGF-like domains (aa 528-796), five NHL repeats, each of which form a β -propeller (aa 1194-1524), and 23 YD/TyrAsp-containing repeats that bind carbohydrates. Cleavage at the N-terminus generates an initial 65 kDa membrane spanning fragment, followed by TM cleavage that generates a 45 kDa cytosolic fragment. C-terminal cleavage generates a short 5 kDa, 41 aa peptide (aa 2682-2722) termed TCAP-1 that shows bioactivity. One splice variant shows a deletion of aa 1232-1239. Over aa 1-317, human Teneurin-1 shares 96% aa identity with mouse Teneurin-1.

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.