

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 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.

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.

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