

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat Teneurin-4 in Western blots and human Teneurin-4 in direct ELISAs. In direct ELISAs, approximately 5% cross-reactivity with recombinant human (rh) Teneurin-1 is observed, and less than 1% cross-reactivity with
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Teneurin-4 Lys61-Lys340 Accession # Q6N022
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 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-4 (also Ten-m4, Doc4 and tenascin-M4) is a 250-300 kDa member of the tenascin family, teneurin subfamily of transmembrane (TM) molecules. It is a covalently-linked homodimer that is widely expressed in the embryo, and in adult, participates in cell-to-cell adhesion, and may communicate ER stress levels. Human Teneurin-4 is a 2769 amino acid (aa) type II TM glycoprotein. It contains a 345 aa cytoplasmic region (aa 1-345), plus a 2403 aa extracellular domain (ECD) (aa 367-2769). The ECD possesses eight sequential EGF-like domains (aa 561-831), five NHL repeats, each of which form a β-propeller (aa 1216-1566), and 23 YD/TyrAsp-containing repeats that bind carbohydrates. C-terminal cleavage generates a short 5 kDa, 41 aa peptide (aa 2726-2766) termed TCAP-1 that shows bioactivity. Teneurin-4 is hypothesized to form heterodimers with other teneurins. Over aa 61-340, human Teneurin-4 shares 95% aa identity with mouse Teneurin-4.

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