

## DESCRIPTION

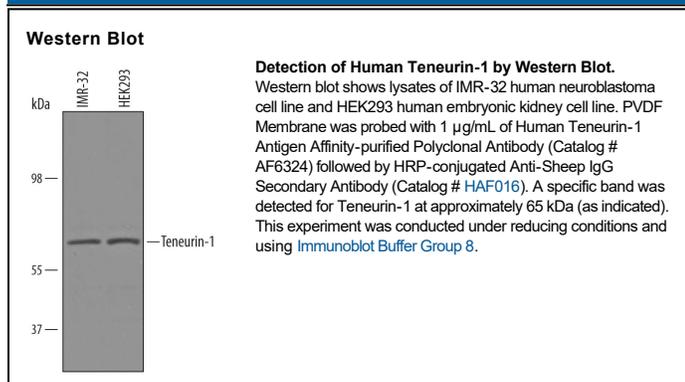
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Teneurin-1 in direct ELISAs and Western blots. In direct ELISAs, approximately 15% cross-reactivity with recombinant human Teneurin-3 is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Teneurin-1 Met1-Lys317 Accession # AAF04723
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

## 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.

	Recommended Concentration	Sample
<b>Western Blot</b>	1 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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.