Human Follistatin-like 4/FSTL4 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF4890

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Follistatin-like 4/FSTL4 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 10% cross-reactivity with recombinant mouse FSTL4 is observed and less than 1% cross-reactivity with recombinant human (rh) FSTL1 and rhFSTL5 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Follistatin-like 4/FSTL4 Trp23-Val842 Accession # NP_055897
Formulation	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
Western Blot	0.1 µg/mL	Recombinant Human Follistatin-like 4/FSTL4 (Catalog # 4890-FN)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Follistatin-like 4 (FSTL4) is a presumably secreted member of the follistatin domain-containing protein family (1). Follistatin itself is a potent inhibitor of the TGF-β superfamily member, activin (1, 2), and this activity is reflected in several other proteins of this family that contain varying numbers of the cysteine-rich follistatin domain. Many of these are matrix proteins such as SPARC and testican for which TGF-β superfamily inhibition status is presumed but unknown (2, 3). R&D Systems recombinant human FSTL4 inhibits the ability of a TGF-β superfamily member, BMP-6, to induce osteoblast differentiation of a mouse fibroblast cell line. Human FSTL4 cDNA encodes an 842 amino acid (aa) protein containing a 22 aa signal sequence, a follistatin (EGF- and kazal-like) domain, an EF-hand calcium-binding motif, and two Ig-like cell adhesion molecule-type (IgCAM) domains (1, 4). The second IgCAM domain contains a consensus sequence for FGF/FGF receptor interaction (4). Mature human FSTL4 shares 84%, 82% and 82% aa identity with mouse, rat and bovine FSTL4, respectively. Identity with other follistatin-like family members is mainly within consensus residues of the follistatin domain. Of two reported human FSTL4 isoforms, one is missing the follistatin and EF-hand domains, while the other contains all recognized domains, but is truncated after aa 600 (4).

References:

1. Glusman, G. *et al.* (2004) BMC Evol. Biol. **4**:43.
2. Schneyer, A. *et al.* (2001) Mol. Cell. Endocrinol. **180**:33.
3. Hohenester, E. *et al.* (1997) EMBO J. **16**:3778.
4. Swissprot Accession # Q6MZW2.

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