

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 FSTL4.
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
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 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

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).

PRODUCT SPECIFIC NOTICES

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