

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
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 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.