

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Lefty-2 in direct ELISAs and Western blots. In direct ELISAs, approximately 65% cross-reactivity with recombinant mouse Lefty-1 is observed, and approximately 20% cross-reactivity with recombinant human Lefty-2 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse Lefty-2 Phe78-Leu368 Accession # P57785
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 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.
Immunocytochemistry	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

Lefty-2 (Left-right determination factor 2; also Lefty-B [in human]) is a atypical member of the TGF-β family of proteins. It is expressed during early embryogenesis in both the primitive streak and left-side lateral plate mesoderm. In the adult, Lefty-2 appears in oviduct epithelium. Lefty-2 acts in a manner reminiscent of that for Chordin and Noggin, and it is assumed that Lefty-2 is an antagonist of BMP activity. Notably, Lefty-2 and Nodal are likely under the control of Lefty-1, and thus all three molecules would appear to contribute to the creation of a left side-type body plan. Mouse Lefty-2 is synthesized as a 368 amino acid (aa) preproprecursor. It contains a 21 aa signal sequence, plus a 347 aa, 41-42 kDa bioactive proprecursor that may undergo proteolytic processing at one of two downstream cleavage sites. If cleavage occurs after Arg77, the resulting 33-34 kDa mature form (aa 78-368) is biologically inactive; if cleavage occurs after Arg135, the resulting 27-28 kDa mature form (aa 136-368) is biologically active. Lefty-2 is not a covalent homodimer and has been suggested to act as a monomer. Over aa 78-368, mouse Lefty-2 shares 94%, 83% and 95% aa sequence identity with rat Lefty-2, human Lefty-B and mouse Lefty-1, respectively.

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.