Human Chordin-like 1/CHRDL1 Alexa Fluor® 594-conjugated Antibody

Monoclonal Mouse IgG_1 Clone # 263737

Catalog Number: FAB1808T

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Chordin-like 1/CHRDL1 in direct ELISAs and Western blots. In Western blots, no cross-reactivity with recombinant mouse Chordin-Like 2 is observed.
Source	Monoclonal Mouse IgG_1 Clone # 263737
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Chordin-like 1/CHRDL1 Glu28-Cys457 Accession # NP_001137454
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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

Chordin-like 1 (CHRDL1) also known as Chordin-like, ventroptin, and neuralin, is a secreted glycoprotein that has significant homology to chordin and acts as a bone morphogenetic protein (BMP) antagonist (1-3). Human Chordin-Like 1 cDNA encodes a 450 amino acid (aa) precursor protein with a putative 21 aa signal peptide. Chordin-Like 1 contains three internal cysteine-rich procollagen repeats (CRs) that are conserved in the spacing of their ten cysteines. The CRs of chordin, especially CR1 and CR3, have been shown to be the functional domains for BMP binding (1). The CR1 and CR3 of Chordin-Like 1 are most similar to CR3 of chordin (1). Chordin-Like 1 and chordin exhibit similar BMP inhibitory activity *in vivo* and directly interact with BMP-4 *in vitro* (1, 2). However, Chordin-Like 1 differs in its spatial and temporal expression from chordin. Mouse Chordin-Like 1 is detected in mesenchyme-derived cells such as the dermatome and limb bud, as well as chondrocytes of the developing skeleton later in development. In addition, Chordin-Like 1 is expressed embryonically in the gastrointestinal tract, kidney tubules, neural tube, CNS, cerebellum, derivatives of the neural crest cells, developing hair follicles, and the olfactory bulb where it is expressed in a gradient in the retina (1-3). Chordin-Like 1 is also expressed in adult marrow stromal cells. Human CHRDL1 and the long form of mouse CHRDL1 share 93% aa sequence identity. Multiple forms of human Chordin-Like 1 containing small deletions or insertions (including an E insertion between P94 and D95, a GKKAK deletion (aa 318-322), and/or another E insertion between K322 and E323) have been described. Similar isoforms have also been reported for mouse Chordin-Like 1. In addition, a short form of mouse Chordin-Like 1 with a shortened variant C-terminus but with all 3 CR domains intact also exists (1). These multiple forms were attributed to alternative splicing and transcriptional termination sites within the coding region of Chordin-Like 1.

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.

Bio-Techne®
Global | bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL: 1.612.379.2956
USA | TEL: 800.343.7475 Canada | TEL: 855.668.8722 Europe | Middle East | Africa TEL: +44.0.1235.529449
China | info.cn@bio-techne.com TEL: 400.821.3475