

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Mouse                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects mouse Chordin in direct ELISAs.                                                                                                                                                                                                                                     |
| <b>Source</b>             | Monoclonal Rat IgG <sub>2A</sub> Clone # 119705                                                                                                                                                                                                                             |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant mouse Chordin<br>Thr27-Ser948<br>Accession # Q9Z0E2                                                                                                                                                                         |
| <b>Conjugate</b>          | Alexa Fluor 594<br>Excitation Wavelength: 590 nm<br>Emission Wavelength: 617 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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.

**ELISA** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

Chordin is a secreted glycoprotein that regulates dorsoventral patterning during gastrulation. Chordin functions as a bone morphogenetic protein (BMP) antagonist that blocks their ventralizing activity by binding to the BMPs and inhibiting their interaction with their receptors. Mouse Chordin cDNA encodes a 948 amino acid (aa) precursor protein with a putative 26 aa signal peptide. Chordin contains four internal cysteine-rich repeats (CRs) that are conserved in the spacing of their ten cysteine residues. The CRs of chordin, especially CR1 and CR3, have been shown to be the functional domains for BMP binding. These conserved CRs are present in an expanding family of secreted molecules that antagonize BMP signaling. Xoloid (an extracellular zinc metalloproteinase) can cleave chordin at two specific sites resulting in chordin fragments with lower BMP-affinity. Cleavage of the chordin/BMP complex can reverse the BMP antagonist activity of chordin. Mouse Chordin is expressed at high levels in 7 day postcoitum mouse embryos. Chordin expression is also detected in multiple fetal and adult tissues, most notably liver and cerebellum, suggesting additional roles for Chordin in organogenesis and homeostasis.

## 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.