

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Carbohydrate Sulfotransferase 1/CHST1 in direct ELISAs. In direct ELISAs, approximately 25-100% cross-reactivity with recombinant mouse CHST1 and no cross-reactivity with recombinant human CHST2, 3, 4, 5, 6, 7, 10, and 14 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 543128
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Carbohydrate Sulfotransferase 1/CHST1 Arg24-Ser411 Accession # O43916
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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.

Neutralization	Optimal dilution of this antibody should be experimentally determined.
Immunoprecipitation	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

The CHST family is comprised of 14 enzymes in humans. All members of this family are Golgi-localized type II membrane proteins. Only the luminal and enzymatic domain is expressed in each of our recombinant CHST proteins. These enzymes transfer sulfate (i.e., sulfonate) onto the 6-O or 4-O positions of GalNAc, Gal and GlcNAc residues on glycoproteins, proteoglycans and glycolipids (1). This sulfation often creates specific epitopes that can be recognized by extracellular matrix proteins, cell surface receptors and viruses (2). CHST1, also known as keratan sulfate Gal-6 sulfotransferase, transfers sulfate to position 6 of galactose residues on keratan sulfate (3). It also has sulfotransferase activity on sialyl N-acetylglucosamine structures and participates in biosynthesis of selectin ligands that play a central role in lymphocyte homing at sites of inflammation (4). Human CHST1 shares 94% amino acid sequence identity with mouse CHST1.

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.