Human Carbohydrate Sulfotransferase 3/CHST3 Alexa Fluor® 405-conjugated Antibody

Monoclonal Mouse IgG_{2B} Clone # 799011

Catalog Number: FAB7450V

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Carbohydrate Sulfotransferase 3/CHST3 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human CHST1 or recombinant mouse CHST3 is observed.
Source	Monoclonal Mouse IgG_{2B} Clone # 799011
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human Carbohydrate Sulfotransferase 3/CHST3 Glu39-Thr479 Accession # Q7LGC8
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.*

Immunohistochemistry	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 human CHST family is comprised of 14 enzymes. 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). CHST3, also known as chondroitin 6-O-sulfotransferase, transfers sulfate to position 6 of GalNAc residues on chondroitin sulfate (3). Chondroitin sulfate constitutes the predominant proteoglycan present in cartilage and is distributed on the surfaces of many cells and extracellular matrices. Loss of CHST3 function in human results in severe chondrodysplasia (4). CHST3 can also sulfate Gal residues of keratan sulfate and Gal residues in sialyl N-acetyllactosamine (sialyl LacNAc) oligosaccharides (5). The enzymatic activity of the recombinant human CHST3 was measured using a phosphatase-coupled sulfotransferease assay (6).

PRODUCT SPECIFIC NOTICES

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