Human Carbohydrate Sulfotransferase 15/CHST15 Alexa Fluor® 750-conjugated Antibody

Monoclonal Mouse IgG_1 Clone # 388421

Catalog Number: FAB3365S

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Carbohydrate Sulfotransferase 15/CHST15 in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG_1 Clone # 388421
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Sulfotransferase 15/CHST15 Ser99-Thr561 Accession # Q7LFX5
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 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

N-Acetylgalactosamine 4-sulfate 6-O-sulfotransferase (GalNAc4S-6ST or CHST15) is a type II transmembrane protein composed of a short N-terminal cytoplasmic domain and a long C-terminal luminal catalytic domain. CHST15 transfers sulfate from 3'-phosphoadenosine 5'-phosphosulfate (PAPS) to the 6-O of GalNAc-4S on chondroitin sulfate A (CS-A) as well as dermatan sulfate (1), generating the chondroitin sulfate E (CS-E) disaccharide unit GlcAβ1-3GalNAc-4S,6S. CS-E binds with strong affinity to Midkine, a heparan sulfate-binding growth factor (2), playing an important regulatory role in differentiation and morphogenesis during embryonic development. In situ hybridization for the expression of CHST15 in the postnatal mouse brain showed a widespread expression of the transcript in the developing brain except at postnatal day 7 (3). For comparison, chondroitin sulfate 6-O sulfotransferase-1 (C6ST-1) encoded by the CHST3 gene, only recognizes and transfers sulfate to the 6-O of *unsulfated* GalNAc residues on chondroitin sulfate generating the chondroitin sulfate C (CS-C) disaccharide unit GlcAβ1-3GalNAc-6S (4). The sequence of the human CHST15 was found to be the same as human B-cell RAG-associated protein (BRAG) (1).

PRODUCT SPECIFIC NOTICES

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