

Recombinant human Carbohydrate sulfotransferase 3/CHST3 protein

Catalog Number: ATGP4001

PRODUCT INFORMATION

Expression system

Baculovirus

Domain

39-479aa

UniProt No.

Q7LGC8

NCBI Accession No.

NP_004264

Alternative Names

C6ST, C6ST-1, C6ST1HSD, Carbohydrate (chondroitin 6) sulfotransferase 3, Chondroitin 6-O-sulfotransferase 1, Chondroitin 6-sulfotransferase, CHST-3, Galactose/N-acetylglucosamine/N-acetylglucosamine 6-O-sulfotransferase 0, GST-0, HSD

PRODUCT SPECIFICATION

Molecular Weight

51.3kDa (450aa)

Concentration

0.25mg/ml (determined by Absorbance at 280nm)

Formulation

Liquid. In Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 90% by SDS - PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Specific activity is > 1,000 pmol/min/ug, and is defined as the amount of enzyme that sulfate from PAPS to Chondroitin Sulfate per minute at pH 7.5, at 25C.

Tag

His-Tag

Application

SDS-PAGE, Enzyme Activity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

Recombinant human Carbohydrate sulfotransferase 3/CHST3 protein

Catalog Number: ATGP4001

BACKGROUND

Description

CHST3, also known as chondroitin 6-O-sulfotransferase, is a member of sulfotransferase 1 family. The human CHST family is comprised of 14 enzymes and all members of this family are Golgi-localized type II membrane proteins. These enzymes utilize 3'-phospho-5'-adenylyl sulfate (PAPS) as sulfonate donor to catalyze the transfer of sulfate to position 6 of the N-acetylgalactosamine (GalNAc) residue of chondroitin. It can also sulfate Gal residues of keratan sulfate and Gal residues in sialyl N-acetyllactosamine (sialyl LacNAc) oligosaccharides. CHST3 is widely expressed in adult tissues. Expressed in heart, placenta, skeletal muscle and pancreas. Also expressed in various immune tissues such as spleen, lymph node, thymus and appendix. Recombinant human CHST3, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

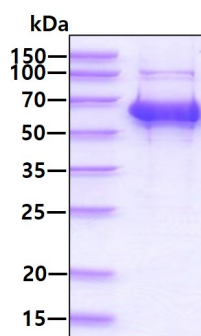
<ADL>EKENKII SRVSDKLGKI PQALADANST DPALILAENA SLLSLSSELD S AFSQLQSRLR NLSLQLGVPE AMEAAGEEEEE
 EQRKEEEPPR PAVAGPRRHV LLMATTRTGS SFVGEFFNQ GNIFYLFEPL WHIERTVSFE PGGANAAGSA LVYRDVLKQL
 FLCDLVLEH FITPLPEDHL TQFMFRRGSS RSLCEDPVCT PFVKKVFEKY HCKNRRCGPL NVTLAAEACR RKEHMALKAV
 RIRQLEFLQP LAEDPRDLR VIQLVRDPRA VLASRMVAFA GKYKTWKKWL DDEGQDGLRE EEVQRLRGNC ESIRLSAELG
 LRQPAWLRGR YMLVRYEDVA RGPLQKAREM YRFAGIPLTP QVEDWIKNT QAAHDGSGIY STQKNSSEQF EKWRFSMPFK
 LAQVVQAACG PAMRLFYKYL ARDAAALTNR SVSLLLEERG FWVT<HHHHHH>

General References

- Hemmerich, S. and Rosen, S. *Glycobiology* 10:849-856.
- Uchimura, K. et al. *J. Biol. Chem.* 277:1443-1450.
- Yusa, A. et al. *J. Biol. Chem.* 281:20393-20403.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain