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.

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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 utilizes 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 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

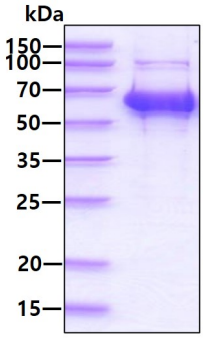
<ADL>EKENKII SRVSDKLKQI PQALADANST DPALILAENA SLLSLSELDS AFSQLQSRLR NLSLQLGVEP AMEAAGEEEE EQRKEEEPPR PAVAGPRRHV LLMATTRTGS SFVGEFFNQQ GNIFYLFEPL WHIERTVSFE PGGANAAGSA LVYRDVLKQL FLCDLYVLEH FITPLPEDHL TQFMFRRGSS RSLCEDPVCT PFVKKVFEKY HCKNRRCGPL NVTLAAEACR RKEHMALKAV RIRQLEFLQP LAEDPRLDLR VIQLVRDPRA VLASRMVAFA GKYKTWKKWL DDEGQDGLRE EEVQRLRGNC ESIRLSAELG LRQPAWLRGR YMLVRYEDVA RGPLQKAREM YRFAGIPLTP QVEDWIQKNT QAAHDGSGIY STQKNSSEQF EKWRFSMPFK LAQVVQAACG PAMRLFGYKL ARDAAALTNR SVSLLEERGT 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