

Datasheet for ABIN7565033  
**CHST1 Protein (AA 1-411) (His tag)**



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## Overview

|                               |  |
|-------------------------------|--|
| Quantity:                     | 1 mg   |
| Target:                       | CHST1  |
| Protein Characteristics:      | AA 1-411                                     |
| Origin:                       | Mouse  |
| Source:                       | HEK-293 Cells                                |
| Protein Type:                 | Recombinant                                  |
| Purification tag / Conjugate: | This CHST1 protein is labelled with His tag. |

## Product Details

|              |  |
|--------------|--|
| Purpose:     | Custom-made recombinant Chst1 Protein expressed in mammalian cells.  |
| Sequence:    | <p>MQCSWKAVLL LALASIAIQY TAIRFTAKS FHTCPGLTDT GLAERLCEEG PTFSYNLSRK<br/>THVLILATTR SGSSFVQQLF NQHMDVYFLF EPLYHVQNTL IPRFTQGKSP ADRRVMLGAS<br/>RDLLRSLYDC DLYFLENYIK PPPVNHTTNR VFRRGASRVL CSRPVCDPPG SSDLILEEGD<br/>CVRMCGLLNL TLAAEACRER SHVAIKTVRV PEVNDLRALV EDPRLNLKVI QLVRDPRGIL<br/>ASRSETFRDT YRLWRLWYGT GRKPYNLDVT QLTTVCEDFS SSVSTGLMRP SWLKGKYMVLV<br/>RYEDLARNPM KKTEEIYEFL GIPLDSHVAH WIQNNTRGDP TLGKHKYSTV RNSAATAEKW<br/>RFRLSYDIVA FAQNACQVL AQLGYKMANS EEELKNPAIS LVEERDFRPF L <b>Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.</b></p> |
| Specificity: | If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.  |

## Product Details

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### Characteristics:

#### Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

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### Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

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### Grade:

custom-made

## Target Details

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### Target:

CHST1

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### Alternative Name:

Chst1 ([CHST1 Products](#))

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### Background:

Carbohydrate sulfotransferase 1 (Galactose/N-acetylglucosamine/N-acetylglucosamine 6-O-sulfotransferase 1) (GST-1) (Keratan sulfate Gal-6 sulfotransferase) (KS6ST) (KSGal6ST) (KSST) (EC 2.8.2.21),FUNCTION: Sulfotransferase that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) as sulfonate donor to catalyze the transfer of sulfate to position 6 of internal galactose (Gal) residues of keratan. Cooperates with B4GALT4 and B3GNT7 glycosyltransferases and CHST6 sulfotransferase to construct and elongate disulfated disaccharide unit [->3(6-sulfoGalbeta)1->4(6-sulfoGlcNAcbeta)1->] within keratan sulfate polymer. Has a preference for sulfating keratan sulfate, but it also transfers sulfate to the unsulfated polymer (By similarity). Involved in biosynthesis of phosphacan, a major keratan sulfate proteoglycan in the developing brain (PubMed:24152993). Involved in biosynthesis of 6-sulfoGalbeta-containing O-linked glycans in high endothelial venules of lymph nodes. May act in a synergistic manner with CHST4 to generate sialyl 6',6'-disulfo Lewis X motif, a recognition determinant for immune cell receptors implicated in leukocyte trafficking (PubMed:23254996) (By similarity). Catalyzes

## Target Details

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sulfation of N-acetyllactosamine (LacNAc) oligosaccharides with highest efficiency for sialylated LacNAc structures (By similarity). {ECO:0000250|UniProtKB:O43916, ECO:0000269|PubMed:23254996, ECO:0000269|PubMed:24152993}.

Molecular Weight: 46.9 kDa

UniProt: [Q9EQC0](#)

Pathways: [Glycosaminoglycan Metabolic Process](#)

## Application Details

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Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

## Handling

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Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months