

Datasheet for ABIN3137182

CHST1 Protein (AA 1-411) (Strep Tag)



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Overview

Quantity:	250 µg
Target:	CHST1
Protein Characteristics:	AA 1-411
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CHST1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	ALICE®
Sequence:	<p>MQCSWKAVLL LALASIAIQY TAIRFTAKS FHTCPGLTDT GLAERLCEEG PTFSYNLSRK THVLILATTR SGSSFVGQLF NQHMDVFYLF EPLYHVQNTL IPRFTQGKSP ADRRVMLGAS RDLLRSLYDC DLYFLENYIK PPPVNHTTNR VFRRGASRVL CSRPCVDPGP SSDLILEEGD CVRMCGLLNL TLAAEACRER SHVAIKTVRV PEVNDLRALV EDPRLNLKVI QLVDRPRGIL ASRSETRDRT YRLWRLWYGT GRKPYNLDVT QLTTVCEDFS SSVSTGLMRP SWLKGKYMVLV RYEDLARNPM KKTEEIYEF L GIPLDSHVAH WIQNNTRGDP TLGKHKYSTV RNSAATAEKW RFRLSYDIVA FAQNACQQVL AQLGYKMANS EEELKNPAIS LVEERDFRPF L</p> <p>Sequence without tag. The proposed Strep-Tag is based on experience s 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.</p>
Characteristics:	Key Benefits:

Product Details

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	CHST1
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Target Details

Alternative Name:	Chst1 (CHST1 Products)
Background:	<p>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 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}.</p>
Molecular Weight:	46.9 kDa
UniProt:	Q9EQC0
Pathways:	Glycosaminoglycan Metabolic Process

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.</p> <p>During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce</p>

Application Details

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Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.
Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months