

Datasheet for ABIN7555398

Solute Carrier Family 17 (Acidic Sugar Transporter), Member 5 (SLC17A5) (AA 1-495) protein (His tag)



[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	Solute Carrier Family 17 (Acidic Sugar Transporter), Member 5 (SLC17A5)
Protein Characteristics:	AA 1-495
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	His tag
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat SLC17A5 Protein expressed in mammalian cells.
Sequence:	<p>MRSPVRDLAR NDGEESTDRT PLLPGAPRAE AAPVCCSARY NLAILAFFGF FIVYALRVNL SVALVDMVDS NTTLEDNRTS KACPEHSAPI KVHHNQTGKK YQWDAETQGW ILGSFFYGYI ITQIPGGYVA SKIGGKMLLG FGILGTAVLT LFTPIAADLG VGPLIVLRAL EGLGEGVTFP AMHAMWSSWA PPLERSKLLS ISYAGAQLGT VISLPLSGII CYMNMWTVYVF YFFGTIGIFW FLLWIWLVSD TPQKHKRISH YEKEYILSSL RNQLSSQKSV PWVPILKSLP LWAIVVAHFS YNWTFYTLT LLPTYMKEIL RFNVQENGFL SSLPYLGSWL CMILSGQAAD NLRKWNFST LCVRRIFSLI GMIGPAVFLV AAGFIGCDYS LAVAFLTIST TLGGFCSSGF SINHLDIAPS YAGILLGITN TFATIPGMVG PVIAKSLTPD NTVGEWQTVF YIAAAINVFG AIFFTLFAKG EVQNWALNDH HGHRH</p> <p>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.</p>

Product Details

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.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

Target Details

Target:

Solute Carrier Family 17 (Acidic Sugar Transporter), Member 5 (SLC17A5)

Alternative Name:

SLC17A5 ([SLC17A5 Products](#))

Background:

Sialin (H+)/nitrate cotransporter) (H+)/sialic acid cotransporter) (AST) (Membrane glycoprotein HP59) (Solute carrier family 17 member 5) (Vesicular excitatory amino acid transporter) (VEAT),FUNCTION: Multifunctional anion transporter that operates via two distinct transport mechanisms, namely proton-coupled anion cotransport and membrane potential-dependent anion transport (PubMed:15510212, PubMed:21781115, PubMed:22778404, PubMed:23889254). Electroneutral proton-coupled acidic monosaccharide symporter, with a sugar to proton stoichiometry of 1:1. Exports glucuronic acid and free sialic acid derived from sialoglycoconjugate degradation out of lysosomes, driven by outwardly directed lysosomal pH gradient. May regulate lysosome function and metabolism of sialylated conjugates that impact oligodendrocyte lineage differentiation and myelinogenesis in the central nervous system (PubMed:15510212, PubMed:21781115, PubMed:22778404, PubMed:23889254) (By similarity). Electrogenic proton-coupled nitrate symporter that transports nitrate ions across the basolateral membrane of salivary gland acinar cells, with nitrate to proton stoichiometry of 2:1.

Target Details

May contribute to nitrate clearance from serum by salivary glands, where it is further concentrated and secreted in the saliva (PubMed:22778404). Uses membrane potential to drive the uptake of acidic amino acids and peptides into synaptic vesicles. Responsible for synaptic vesicular storage of L-aspartate and L-glutamate in pinealocytes as well as vesicular uptake of N-acetyl-L-aspartyl-L-glutamate neuropeptide, relevant to aspartergic-associated glutamatergic neurotransmission and activation of metabotropic receptors that inhibit subsequent transmitter release (PubMed:21781115, PubMed:22778404, PubMed:23889254) (By similarity). {ECO:0000250|UniProtKB:Q5Q0U0, ECO:0000250|UniProtKB:Q8BN82, ECO:0000269|PubMed:15510212, ECO:0000269|PubMed:21781115, ECO:0000269|PubMed:22778404, ECO:0000269|PubMed:23889254}., FUNCTION: Receptor for CM101, a polysaccharide produced by group B Streptococcus with antipathoangiogenic properties. {ECO:0000250|UniProtKB:Q9MZD1}.

Molecular Weight: 54.6 kDa

UniProt: [Q9NRA2](#)

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.

Restrictions: For Research Use only

Handling

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