Datasheet for ABIN7551650

SLC39A8 Protein (AA 1-460) (His tag)

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Overview

Quantity:	1 mg
Target:	SLC39A8
Protein Characteristics:	AA 1-460
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC39A8 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant SLC39A8 Protein expressed in mammalian cells.
Sequence:	MAPGRAVAGL LLLAAAGLGG VAEGPGLAFS EDVLSVFGAN LSLSAAQLQH LLEQMGAASR VGVPEPGQLH FNQCLTAEEI FSLHGFSNAT QITSSKFSVI CPAVLQQLNF HPCEDRPKHK TRPSHSEVWG YGFLSVTIIN LASLLGLILT PLIKKSYFPK ILTFFVGLAI GTLFSNAIFQ LIPEAFGFDP KVDSYVEKAV AVFGGFYLLF FFERMLKMLL KTYGQNGHTH FGNDNFGPQE KTHQPKALPA INGVTCYANP AVTEANGHIH FDNVSVVSLQ DGKKEPSSCT CLKGPKLSEI GTIAWMITLC DALHNFIDGL AIGASCTLSL LQGLSTSIAI LCEEFPHELG DFVILLNAGM STRQALLFNF LSACSCYVGL AFGILVGNNF APNIIFALAG GMFLYISLAD MFPEMNDMLR EKVTGRKTDF TFFMIQNAGM LTGFTAILLI TLYAGEIELE **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.**
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different

Product Details

	isoform, please contact us regarding an individual offer.
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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	SLC39A8
Alternative Name:	SLC39A8 (SLC39A8 Products)
Background:	Metal cation symporter ZIP8 (BCG-induced integral membrane protein in monocyte clone 103 protein) (LIV-1 subfamily of ZIP zinc transporter 6) (LZT-Hs6) (Solute carrier family 39 member 8) (Zrt- and Irt-like protein 8) (ZIP-8),FUNCTION: Electroneutral divalent metal cation:bicarbonate symporter of the plasma membrane mediating the cellular uptake of zinc and manganese, two divalent metal cations important for development, tissue homeostasis and immunity (PubMed:12504855, PubMed:22898811, PubMed:23403290, PubMed:29337306, PubMed:26637978, PubMed:29453449). Transports an electroneutral complex composed of a divalent metal cation and two bicarbonate anions or alternatively a bicarbonate and a selenite anion (PubMed:27166256, PubMed:31699897). Thereby, it also contributes to the cellular uptake of selenium, an essential trace metal and micronutrient (PubMed:27166256). Also imports cadmium a non-essential metal which is cytotoxic and carcinogenic (PubMed:27466201). May also transport iron and cobalt through membranes

Target Details

	(PubMed:22898811). Through zinc import, indirectly regulates the metal-dependent transcription factor MTF1 and the expression of some metalloproteases involved in cartilage catabolism and also probably heart development (PubMed:29337306). Also indirectly regulates the expression of proteins involved in cell morphology and cytoskeleton organization (PubMed:29927450). Indirectly controls innate immune function and inflammatory response by regulating zinc cellular uptake which in turn modulates the expression of genes specific of these processes (PubMed:23403290, PubMed:28056086). Protects, for instance, cells from injury and death at the onset of inflammation (PubMed:18390834). By regulating zinc influx into monocytes also directly modulates their adhesion to endothelial cells and arteries (By similarity). Reclaims manganese from the bile at the apical membrane of hepatocytes, thereby regulating the activity of the manganese-dependent enzymes through the systemic levels of the nutrient (PubMed:28481222). Also participates in manganese reabsorption in the proximal tubule of the kidney (PubMed:26637978). By mediating the extracellular uptake of manganese by cells of the blood-brain barrier, may also play a role in the transport of the micronutrient to the brain (PubMed:26637978, PubMed:31699897). With manganese cellular uptake also participates in mitochondrial proper function (PubMed:29453449). Finally, also probably functions intracellularly, translocating zinc from lysosome to cytosol to indirectly enhance the expression of specific genes during TCR-mediated T cell activation (PubMed:19401385). {ECO:0000250|UniProtKB:Q91W10, ECO:0000269|PubMed:12504855, ECO:0000269|PubMed:18390834, ECO:0000269|PubMed:19401385, ECO:0000269|PubMed:22898811, ECO:0000269|PubMed:23403290, ECO:0000269|PubMed:26637978, ECO:0000269|PubMed:27166256, ECO:0000269|PubMed:27466201, ECO:0000269|PubMed:28056086, ECO:0000269|PubMed:28481222, ECO:0000269|PubMed:29337306, ECO:0000269|PubMed:29453449, ECO:0000269|PubMed:29927450, ECO:0000269|PubMed:31699897}.
Molecular Weight:	49.6 kDa
UniProt:	Q9C0K1

Application Details

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

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