Datasheet for ABIN7555348

SLC22A4 Protein (AA 1-551) (His tag)

Go to Product page

Overview

Quantity:	1 mg
Target:	SLC22A4
Protein Characteristics:	AA 1-551
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC22A4 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant SLC22A4 Protein expressed in mammalian cells.
Sequence:	MRDYDEVIAF LGEWGPFQRL IFFLLSASII PNGFNGMSVV FLAGTPEHRC RVPDAANLSS AWRNNSVPLR LRDGREVPHS CSRYRLATIA NFSALGLEPG RDVDLGQLEQ ESCLDGWEFS QDVYLSTVVT EWNLVCEDNW KVPLTTSLFF VGVLLGSFVS GQLSDRFGRK NVLFATMAVQ TGFSFLQIFS ISWEMFTVLF VIVGMGQISN YVVAFILGTE ILGKSVRIIF STLGVCTFFA VGYMLLPLFA YFIRDWRMLL LALTVPGVLC VPLWWFIPES PRWLISQRRF REAEDIIQKA AKMNNIAVPA VIFDSVEELN PLKQQKAFIL DLFRTRNIAI MTIMSLLLWM LTSVGYFALS LDAPNLHGDA YLNCFLSALI EIPAYITAWL LLRTLPRRYI IAAVLFWGGG VLLFIQLVPV DYYFLSIGLV MLGKFGITSA FSMLYVFTAE LYPTLVRNMA VGVTSTASRV GSIIAPYFVY LGAYNRMLPY IVMGSLTVLI GILTLFFPES LGMTLPETLE QMQKVKWFRS GKKTRDSMET EENPKVLITA F **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.**

Product Details

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.
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:	SLC22A4
Alternative Name:	SLC22A4 (SLC22A4 Products)
Background:	Solute carrier family 22 member 4 (Ergothioneine transporter) (ET transporter) (ETTh) (Organic cation/carnitine transporter 1) (OCTN1),FUNCTION: Transporter that mediates the transport of endogenous and microbial zwitterions and organic cations (PubMed:15795384, PubMed:10215651, PubMed:16729965, PubMed:20601551, PubMed:22569296, PubMed:29530864, PubMed:15107849, PubMed:22206629). Functions as a Na(+)-dependent and pH -dependent high affinity microbial symporter of potent food-derived antioxidant ergothioeine (PubMed:15795384, PubMed:29530864, PubMed:33124720). Transports one sodium ion with one ergothioeine molecule (By similarity). Involved in the absorption of ergothioneine from the luminal/apical side of the small intestine and renal tubular cells, and into non-parenchymal liver cells, thereby contributing to maintain steady-state ergothioneine level in the body (PubMed:20601551). Also mediates the bidirectional transport of acetycholine,

Target Details

	although the exact transport mechanism has not been fully identified yet (PubMed:22206629). Most likely exports anti-inflammatory acetylcholine in non-neuronal tissues, thereby contributing to the non-neuronal cholinergic system (PubMed:22569296, PubMed:22206629). Displays a general physiological role linked to better survival by controlling inflammation and oxidative stress, which may be related to ergothioneine and acetycholine transports (PubMed:15795384, PubMed:22206629). May also function as a low-affinity Na(+)-dependent transporter of L-carnitine through the mitochondrial membrane, thereby maintaining intracellular carnitine homeostasis (PubMed:10215651, PubMed:16729965, PubMed:15107849). May contribute to regulate the transport of cationic compounds in testis across the blood-testis-barrier (PubMed:35307651). {ECO:0000250|UniProtKB:Q9R141, ECO:0000269|PubMed:10215651, ECO:0000269|PubMed:15107849, ECO:0000269|PubMed:15795384, ECO:0000269|PubMed:16729965, ECO:0000269|PubMed:20601551, ECO:0000269|PubMed:22206629, ECO:0000269|PubMed:22569296, ECO:0000269|PubMed:29530864, ECO:0000269|PubMed:35307651}.
Molecular Weight:	62.2 kDa
UniProt:	Q9H015

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