Datasheet for ABIN7554355

SLC7A8 Protein (AA 1-535) (His tag)

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Overview

Quantity:	1 mg
Target:	SLC7A8
Protein Characteristics:	AA 1-535
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC7A8 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant SLC7A8 Protein expressed in mammalian cells.
Sequence:	MEEGARHRNN TEKKHPGGGE SDASPEAGSG GGGVALKKEI GLVSACGIIV GNIIGSGIFV SPKGVLENAG SVGLALIVWI VTGFITVVGA LCYAELGVTI PKSGGDYSYV KDIFGGLAGF LRLWIAVLVI YPTNQAVIAL TFSNYVLQPL FPTCFPPESG LRLLAAICLL LLTWVNCSSV RWATRVQDIF TAGKLLALAL IIIMGIVQIC KGEYFWLEPK NAFENFQEPD IGLVALAFLQ GSFAYGGWNF LNYVTEELVD PYKNLPRAIF ISIPLVTFVY VFANVAYVTA MSPQELLASN AVAVTFGEKL LGVMAWIMPI SVALSTFGGV NGSLFTSSRL FFAGAREGHL PSVLAMIHVK RCTPIPALLF TCISTLLMLV TSDMYTLINY VGFINYLFYG VTVAGQIVLR WKKPDIPRPI KINLLFPIIY LLFWAFLLVF SLWSEPVVCG IGLAIMLTGV PVYFLGVYWQ HKPKCFSDFI ELLTLVSQKM CVVVYPEVER GSGTEEANED MEEQQQPMYQ PTPTKDKDVA GQPQP **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:	SLC7A8
Alternative Name:	SLC7A8 (SLC7A8 Products)
Background:	Large neutral amino acids transporter small subunit 2 (L-type amino acid transporter 2) (hLAT2) (Solute carrier family 7 member 8),FUNCTION: Associates with SLC3A2 to form a functional heterodimeric complex that translocates small and large neutral amino acids with broad specificity and a stoichiometry of 1:1. Functions as amino acid antiporter mediating the influx of extracellular essential amino acids mainly in exchange with the efflux of highly concentrated intracellular amino acids (PubMed:10391915, PubMed:15918515, PubMed:11311135, PubMed:11847106, PubMed:12716892, PubMed:15081149, PubMed:29355479, PubMed:33298890, PubMed:34848541). Has relatively symmetrical selectivities but strongly asymmetrical substrate affinities at both the intracellular and extracellular sides of the transporter (PubMed:11847106). This asymmetry allows SLC7A8 to regulate intracellular amino acid pools (mM concentrations) by exchange with external amino

Target Details

	acids (uM concentration range), equilibrating the relative concentrations of different amino acids across the plasma membrane instead of mediating their net uptake (PubMed:11847106, PubMed:10391915). May play an essential role in the reabsorption of neutral amino acids from the epithelial cells to the bloodstream in the kidney (PubMed:12716892). Involved in the uptake of methylmercury (MeHg) when administered as the L-cysteine or D,L-homocysteine complexes, and hence plays a role in metal ion homeostasis and toxicity (PubMed:12117417). Involved in the cellular activity of small molecular weight nitrosothiols, via the stereoselective transport of L-nitrosocysteine (L-CNSO) across the transmembrane (PubMed:15769744). Imports the thyroid hormone diiodothyronine (T2) and to a smaller extent triiodothyronine (T3) but not rT 3 or thyroxine (T4) (By similarity). Mediates the uptake of L-DOPA (By similarity). May participate in auditory function (By similarity). {ECO:0000250|UniProtKB:Q9QXW9, ECO:0000250|UniProtKB:Q9WVR6, ECO:0000269|PubMed:10391915, ECO:0000269|PubMed:11311135, ECO:0000269|PubMed:11847106, ECO:0000269|PubMed:12117417, ECO:0000269|PubMed:12716892, ECO:0000269|PubMed:15081149, ECO:0000269|PubMed:15769744, ECO:0000269|PubMed:15918515, ECO:0000269|PubMed:29355479, ECO:0000269|PubMed:33298890, ECO:0000269|PubMed:34848541}.
Molecular Weight:	58.4 kDa
UniProt:	Q9UHI5

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