Datasheet for ABIN7563405

SLC1A5 Protein (AA 1-553) (His tag)

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Overview

Quantity:	1 mg
Target:	SLC1A5
Protein Characteristics:	AA 1-553
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC1A5 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat Slc1a5 Protein expressed in mammalien cells.
Sequence:	MAVDPPKADP KGVAVDSSRR CPALGSREDQ SAKAGGCCGS RDRVRRCIRA NLLVLLTVAA VVAGVGLGLG VSAAGGADAL GPARLTRFAF PGELLLRLLK MIILPLVVCS LIGGAASLDP SALGRVGAWA LLFFLVTTLL ASALGVGLAL ALKPGAAVTA ITSINDSVVD PCARSAPTKE ALDSFLDLVR NIFPSNLVSA AFRSFATSYE PKDNSCKIPQ SCIQREINST MVQLLCEVEG MNILGLVVFA IVFGVALRKL GPEGELLIRF FNSFNDATMV LVSWIMWYAP VGILFLVASK IVEMKDVRQL FISLGKYILC CLLGHAIHGL LVLPLIYFLF TRKNPYRFLW GIMTPLATAF GTSSSSATLP LMMKCVEEKN GVAKHISRFI LPIGATVNMD GAALFQCVAA VFIAQLNGVS LDFVKIITIL VTATASSVGA AGIPAGGVLT LAIILEAVSL PVKDISLILA VDWLVDRSCT VLNVEGDAFG AGLLQSYVDR TKMPSSEPEL IQVKNEVSLN PLPLATEEGN PLLKQYQGPT GDSSATFEKE SVM **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.**

Product Details

	In case you have a special request, please contact us.
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien 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:	SLC1A5
Alternative Name:	Slc1a5 (SLC1A5 Products)
Background:	Neutral amino acid transporter B(0) (ATB(0)) (ASC-like Na(+)-dependent neutral amino acid transporter ASCT2) (Insulin-activated amino acid transporter) (Sodium-dependent neutral amino acid transporter type 2) (Solute carrier family 1 member 5),FUNCTION: Sodium-coupled antiporter of neutral amino acids. In a tri-substrate transport cycle, exchanges neutral amino acids between the extracellular and intracellular compartments, coupled to the inward cotransport of at least one sodium ion (By similarity) (PubMed:7702599, PubMed:8662767). The preferred substrate is the essential amino acid L-glutamine, a precursor for biosynthesis of proteins, nucleotides and amine sugars as well as an alternative fuel for mitochondrial oxidative phosphorylation. Exchanges L-glutamine with other neutral amino acids such as L-serine, L-threonine and L-asparagine in a bidirectional way. Provides L-glutamine to proliferating stem and activated cells driving the metabolic switch toward cell differentiation (By similarity). The transport cycle is usually pH -independent, with the exception of L-glutamate. Transports

Target Details

	extracellular L-glutamate coupled to the cotransport of one proton and one sodium ion in exchange for intracellular L-glutamine counter-ion. May provide for L-glutamate uptake in glial cells regulating glutamine/glutamate cycle in the nervous system (By similarity). Can transport D-amino acids. Mediates D-serine release from the retinal glia potentially affecting NMDA receptor function in retinal neurons (By similarity). Displays sodium- and amino acid-dependent but uncoupled channel-like anion conductance with a preference SCN(-) >> NO3(-) > I(-) > Cl(-) (By similarity). Through binding of the fusogenic protein syncytin-1/ERVW-1 may mediate trophoblasts syncytialization, the spontaneous fusion of their plasma membranes, an essential process in placental development (By similarity). {ECO:0000250|UniProtKB:D3ZJ25, ECO:0000250|UniProtKB:Q15758, ECO:0000269|PubMed:7702599, ECO:0000269|PubMed:8662767}.
Molecular Weight:	58.5 kDa
UniProt:	P51912
Pathways:	Dicarboxylic Acid Transport, Warburg Effect

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

