

Datasheet for ABIN7561386
SLC02A1 Protein (AA 1-643) (His tag)



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Overview

Quantity:	1 mg
Target:	SLC02A1
Protein Characteristics:	AA 1-643
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC02A1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat Slco2a1 Protein expressed in mammalien cells.
Sequence:	MGLLPKPGAR QGSGTSSVPA RRCSRSVFNN IKVFLCHGL LQLCQLLYSA YFKSSLTIE KRFGLSSSSS GLISSLNEIS NAILIIFVSY FGSRVNRPRM IGIGLLAA GAFVLTLPHF LSEPYQYAST TAGNSSHFQT DLCQKHLPLG LPSKCHSTVP DTQKETSSMW SLMVVAQLLA GVGTVPPIQPF GISYVDDFAE PTNSPLYISI LFAIAVFGPA FGYLLGSVML RIFVDYGRVD TATVNLSPGD PRWIGAWWLG LLISSGFLIV TSLPFFFFPR AMSRGAERSV IAEETMKMEE DKSRGSLMDF IKRFPRIFLR LLMNPLFMLV VLSQCTFSSV IAGLSTFLNK FLEKQYDASA AYANLLIGAV NLPAAALGML FGGILMKRFV FPLQTIPRVA ATIMTISIIL CAPLFFMGCS TPAVAEVYPP STPSSIHPQP PACRRDCLCP DSVFHPVCGD NGVEYLSPCH AGCSSLNVSS AASKQPIYLN CSCVTGGSAS AKTGSCPTSC AQLLLPSIFL ISFVALIACV SHNPLYMMVL RVVNQDEKSF AIGVQFLMR LLAWLPSPSL YGLLIDSSCI RWNYLCSGRR GACAYYDNDA LRNRYLGLQV IYKVLGTTTT FFISWRVKKK REYSLQENAS GLI 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.

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:

SLC02A1

Alternative Name:

Slco2a1 ([SLC02A1 Products](#))

Background:

Solute carrier organic anion transporter family member 2A1 (SLC02A1) (OATP2A1) (PHOAR2) (Prostaglandin transporter) (PGT) (Solute carrier family 21 member 2) (SLC21A2),FUNCTION: Mediates the transport of prostaglandins (PGs, mainly PGE2, PGE1, PGE3, PGF2alpha, PGD2, PGH2) and thromboxanes (thromboxane B2) across the cell membrane (PubMed:10484490) (Probable). PGs and thromboxanes play fundamental roles in diverse functions such as intraocular pressure, gastric acid secretion, renal salt and water transport, vascular tone, and fever (By similarity). Plays a role in the clearance of PGs from the circulation through cellular uptake, which allows cytoplasmic oxidation and PG signal termination (PubMed:10484490) (Probable). PG uptake is dependent upon membrane potential and involves exchange of a monovalent anionic substrate (PGs exist physiologically as an anionic monovalent form) with a

Target Details

stoichiometry of 1:1 for divalent anions or of 1:2 for monovalent anions (By similarity). Uses lactate, generated by glycolysis, as a counter-substrate to mediate PG influx and efflux. Under nonglycolytic conditions, metabolites other than lactate might serve as counter-substrates. Although the mechanism is not clear, this transporter can function in bidirectional mode (By similarity). When apically expressed in epithelial cells, it facilitates transcellular transport (also called vectorial release), extracting PG from the apical medium and facilitating transport across the cell toward the basolateral side, whereupon the PG exits the cell by simple diffusion (PubMed:18579702). In the renal collecting duct, regulates renal Na⁺ balance by removing PGE₂ from apical medium (PGE₂ EP₄ receptor is likely localized to the luminal/apical membrane and stimulates Na⁺ resorption) and transporting it toward the basolateral membrane (where PGE₂ EP₁ and EP₃ receptors inhibit Na⁺ resorption) (PubMed:18579702). Plays a role in endometrium during decidualization, increasing uptake of PGs by decidual cells (By similarity). Involved in critical events for ovulation (PubMed:27169804). Regulates extracellular PGE₂ concentration for follicular development in the ovaries (PubMed:27169804). When expressed intracellularly, such as in macrophages, contributes to vesicular uptake of newly synthesized intracellular PGs, thereby facilitating exocytotic secretion of PGs without being metabolized (PubMed:26474801). Essential core component of the major type of large-conductance anion channel, Maxi-Cl, which plays essential roles in inorganic anion transport, cell volume regulation and release of ATP and glutamate not only in physiological processes but also in pathological processes (PubMed:29046334, PubMed:32442363). May contribute to regulate the transport of organic compounds in testis across the blood-testis-barrier (By similarity). {ECO:0000250|UniProtKB:Q92959, ECO:0000269|PubMed:10484490, ECO:0000269|PubMed:18579702, ECO:0000269|PubMed:26474801, ECO:0000269|PubMed:27169804, ECO:0000269|PubMed:29046334, ECO:0000269|PubMed:32442363, ECO:0000305|PubMed:26692285}.

Molecular Weight: 70.1 kDa

UniProt: [Q9EPT5](#)

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