Datasheet for ABIN7555515

SLCO4C1 Protein (AA 1-724) (His tag)

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Overview

Quantity:	1 mg
Target:	SLCO4C1 (OATP-H)
Protein Characteristics:	AA 1-724
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLCO4C1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant SLCO4C1 Protein expressed in mammalian cells.
Sequence:	MKSAKGIENL AFVPSSPDIL RRLSASPSQI EVSALSSDPQ RENSQPQELQ KPQEPQKSPE PSLPSAPPNV SEEKLRSLSL SEFEEGSYGW RNFHPQCLQR CNTPGGFLLH YCLLAVTQGI VVNGLVNISI STVEKRYEMK SSLTGLISSS YDISFCLLSL FVSFFGERGH KPRWLAFAAF MIGLGALVFS LPQFFSGEYK LGSLFEDTCV TTRNSTSCTS STSSLSNYLY VFILGQLLLG AGGTPLYTLG TAFLDDSVPT HKSSLYIGTG YAMSILGPAI GYVLGGQLLT IYIDVAMGES TDVTEDDPRW LGAWWIGFLL SWIFAWSLII PFSCFPKHLP GTAEIQAGKT SQAHQSNSNA DVKFGKSIKD FPAALKNLMK NAVFMCLVLS TSSEALITTG FATFLPKFIE NQFGLTSSFA ATLGGAVLIP GAALGQILGG FLVSKFRMTC KNTMKFALFT SGVALTLSFV FMYAKCENEP FAGVSESYNG TGELGNLIAP CNANCNCSRS YYYPVCGDGV QYFSPCFAGC SNPVAHRKPK VYYNCSCIER KTEITSTAET FGFEAKAGKC ETHCAKLPIF LCIFFIVIIF TFMAGTPITV SILRCVNHRQ RSLALGIQFM VLRLLGTIPG PIIFGFTIDS TCILWDINDC GIKGACWIYD NIKMAHMLVA ISVTCKVITM FFNGFAIFLY KPPPSATDVS FHKENAVVTN VLAEQDLNKI VKEG **Sequence**

Product Details

	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 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:	SLCO4C1 (OATP-H)
Alternative Name:	SLCO4C1 (OATP-H Products)
Background:	Solute carrier organic anion transporter family member 4C1 (SLCO4C1) (OATP-H) (Organic anion transporter M1) (OATP-M1) (Organic anion transporting polypeptide 4C1) (OATP4C1) (Solute carrier family 21 member 20),FUNCTION: Mediates the transport of organic anions such as steroids (estrone 3-sulfate, chenodeoxycholate, glycocholate) and thyroid hormones (3,3',5-triiodo-L-thyronine (T3), L-thyroxine (T4)), in the kidney (PubMed:14993604, PubMed:19129463, PubMed:20610891). Capable of transporting cAMP and pharmacological substances such as digoxin, ouabain and methotrexate (PubMed:14993604). Transport is independent of sodium, chloride ion, and ATP (PubMed:14993604). Transport activity is stimulated by an acidic

Target Details

	extracellular environment due to increased substrate affinity to the transporter (PubMed:19129463). The driving force for this transport activity is currently not known (By similarity). The role of hydrogencarbonate (HCO3(-), bicarbonate) as the probable counteranion that exchanges for organic anions is still not well defined (PubMed:19129463). Functions as an uptake transporter at the apical membrane, suggesting a role in renal reabsorption (By similarity). Involved in the renal secretion of the uremic toxin ADMA (N(omega),N(omega)-dimethyl-L-arginine or asymmetrical dimethylarginine), which is associated to cardiovascular events and mortality, and the structurally related amino acids L-arginine and L-homoarginine (a cardioprotective biomarker) (PubMed:30865704). Can act bidirectionally, suggesting a dual protective role of this transport protein, exporting L-homoarginine after being synthesized in proximal tubule cells, and mediating uptake of ADMA from the blood into proximal tubule cells where it is degraded by the enzyme dimethylarginine dimethylaminohydrolase 1 (DDAH1) (PubMed:30865704, PubMed:32642843). May be involved in sperm maturation by enabling directed movement of organic anions and compounds within or between cells (By similarity). This ion-transporting process is important to maintain the strict epididymal homeostasis necessary for sperm maturation (By similarity). May have a role in secretory functions since seminal vesicle epithelial cells are assumed to secrete proteins involved in decapacitation by modifying surface proteins to facilitate the acquisition of the ability to fertilize the egg (By similarity). {ECO:0000250|UniProtKB:Q71MB6, ECO:0000250|UniProtKB:Q8BGD4, ECO:0000269|PubMed:14993604, ECO:0000269|PubMed:19129463, ECO:0000269|PubMed:20610891, ECO:0000269|PubMed:30865704, ECO:0000269|PubMed:32642843}.
Molecular Weight:	78.9 kDa
UniProt:	Q6ZQN7

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

Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months