Datasheet for ABIN7555513

SLCO2B1 Protein (AA 1-709) (His tag)

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Overview

Quantity:	1 mg
Target:	SLCO2B1
Protein Characteristics:	AA 1-709
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLCO2B1 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant SLCO2B1 Protein expressed in mammalian cells.
Sequence:	MGPRIGPAGE VPQVPDKETK ATMGTENTPG GKASPDPQDV RPSVFHNIKL FVLCHSLLQL AQLMISGYLK SSISTVEKRF GLSSQTSGLL ASFNEVGNTA LIVFVSYFGS RVHRPRMIGY GAILVALAGL LMTLPHFISE PYRYDNTSPE DMPQDFKASL CLPTTSAPAS APSNGNCSSY TETQHLSVVG IMFVAQTLLG VGGVPIQPFG ISYIDDFAHN SNSPLYLGIL FAVTMMGPGL AFGLGSLMLR LYVDINQMPE GGISLTIKDP RWVGAWWLGF LIAAGAVALA AIPYFFFPKE MPKEKRELQF RRKVLAVTDS PARKGKDSPS KQSPGESTKK QDGLVQIAPN LTVIQFIKVF PRVLLQTLRH PIFLLVVLSQ VCLSSMAAGM ATFLPKFLER QFSITASYAN LLIGCLSFPS VIVGIVVGGV LVKRLHLGPV GCGALCLLGM LLCLFFSLPL FFIGCSSHQI AGITHQTSAH PGLELSPSCM EACSCPLDGF NPVCDPSTRV EYITPCHAGC SSWVVQDALD NSQVFYTNCS CVVEGNPVLA GSCDSTCSHL VVPFLLLVSL GSALACLTHT PSFMLILRGV KKEDKTLAVG IQFMFLRILA WMPSPVIHGS AIDTTCVHWA LSCGRRAVCR YYNNDLLRNR FIGLQFFFKT GSVICFALVL AVLRQQDKEA RTKESRSSPA VEQQLLVSGP GKKPEDSRV **Sequence without tag.**

Product Details

	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:	SLCO2B1
Alternative Name:	SLCO2B1 (SLCO2B1 Products)
Background:	Solute carrier organic anion transporter family member 2B1 (Organic anion transporter B) (OATP-B) (Organic anion transporter polypeptide-related protein 2) (OATP-RP2) (OATPRP2) (Organic anion transporting polypeptide 2B1) (OATP2B1) (Solute carrier family 21 member 9),FUNCTION: Mediates the Na(+)-independent transport of steroid sulfate conjugates and other specific organic anions (PubMed:10873595, PubMed:11159893, PubMed:11932330, PubMed:12724351, PubMed:14610227, PubMed:16908597, PubMed:18501590, PubMed:20507927, PubMed:22201122, PubMed:23531488, PubMed:25132355, PubMed:27576593, PubMed:26383540, PubMed:28408210, PubMed:29871943,

PubMed:34628357). Responsible for the transport of estrone 3-sulfate (E1S) through the basal membrane of syncytiotrophoblast, highlighting a potential role in the placental absorption of fetal-derived sulfated steroids including the steroid hormone precursor dehydroepiandrosterone sulfate (DHEA-S) (PubMed:11932330, PubMed:12409283). Also facilitates the uptake of sulfated steroids at the basal/sinusoidal membrane of hepatocytes, therefore accounting for the major part of organic anions clearance of liver (PubMed:11159893). Mediates the intestinal uptake of sulfated steroids (PubMed:12724351, PubMed:28408210). Mediates the uptake of the neurosteroids DHEA-S and pregnenolone sulfate (PregS) into the endothelial cells of the blood-brain barrier as the first step to enter the brain (PubMed:16908597, PubMed:25132355). Also plays a role in the reuptake of neuropeptides such as substance P/TAC1 and vasoactive intestinal peptide/VIP released from retinal neurons (PubMed:25132355). May act as a heme transporter that promotes cellular iron availability via heme oxygenase/HMOX2 and independently of TFRC (PubMed:35714613). Also transports heme by-product coproporphyrin III (CPIII), and may be involved in their hepatic disposition (PubMed:26383540). Mediates the uptake of other substrates such as prostaglandins D2 (PGD2), E1 (PGE1) and E2 (PGE2), taurocholate, L-thyroxine, leukotriene C4 and thromboxane B2 (PubMed:10873595, PubMed:14610227, PubMed:19129463, Ref.25, PubMed:29871943). May contribute to regulate the transport of organic compounds in testis across the blood-testis-barrier (Probable). Shows a pH -sensitive substrate specificity which may be ascribed to the protonation state of the binding site and leads to a stimulation of substrate transport in an acidic microenvironment (PubMed:14610227, PubMed:19129463, PubMed:22201122). The exact transport mechanism has not been yet deciphered but most likely involves an anion exchange, coupling the cellular uptake of organic substrate with the efflux of an anionic compound (PubMed:19129463, PubMed:20507927, PubMed:26277985). Hydrogencarbonate/HCO3(-) acts as a probable counteranion that exchanges for organic anions (PubMed:19129463). Cytoplasmic glutamate may also act as counteranion in the placenta (PubMed:26277985). An inwardly directed proton gradient has also been proposed as the driving force of E1S uptake with a (H(+):E1S) stoichiometry of (1:1) (PubMed:20507927). {ECO:0000269|PubMed:10873595, ECO:0000269|PubMed:11159893, ECO:0000269|PubMed:11932330, ECO:0000269|PubMed:12409283, ECO:0000269|PubMed:12724351, ECO:0000269|PubMed:14610227, ECO:0000269|PubMed:16908597, ECO:0000269|PubMed:18501590, ECO:0000269|PubMed:19129463, ECO:0000269|PubMed:20507927, ECO:0000269|PubMed:22201122, ECO:0000269|PubMed:23531488, ECO:0000269|PubMed:25132355, ECO:0000269|PubMed:26277985, ECO:0000269|PubMed:26383540, ECO:0000269|PubMed:27576593, ECO:0000269|PubMed:29871943,

Target Details

	ECO:0000269|PubMed:34628357, ECO:0000269|PubMed:35714613, ECO:0000269|Ref.25, ECO:0000305|PubMed:35307651}., FUNCTION: [Isoform 3]: Has estrone 3-sulfate (E1S) transport activity comparable with the full-length isoform 1. {ECO:0000269|PubMed:23531488}.
Molecular Weight:	76.7 kDa
UniProt:	O94956

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

