

Recombinant Rat SO1B2 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52599

Size: 10ug, 100ug

Protein Name: Solute carrier organic anion transporter family member 1B2 (Liver-specific organic anion transporter 1) (rLST-1) (Sodium-independent organic anion-transporting polypeptide 4) (OATP-4) (Solute carrier family 21 member 10)

Synonym: Slco1b2, Oatp1b2, Slc21a10

UniProt ID: Q9QZX8

UniProt Link: www.uniprot.org/uniprotkb/Q9QZX8/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 687 AA

Molecular Weight: 77 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MDHTQQSRKAAEAQPSRSKQTRFCDGFKLFLAALSFSYICKALGGVVMKSSITQIERRFDIPSSISGLI
DGGFEIGNLLVIVFVSFYFGSKLHRPKLIGIGCFIMGIGSILTALPHFFMGYYKYAKENDIGSLGNSTLTC
FINQMTSPTGPSPEIVEKGCEKGLKSHMWIYVLMGNMLRGIGETPIVPLGISYLDLDDFAKEGHTSMHLG
TLHTIAMIGPILGFIMSSVFAKIYVDVGYVDLNSVRITPNNDARWVGAWWLSFIVNGLLCITSSIPFFFLPK
IPKRSQEERKNSVSLHAPKTDEEKKHMTNLTQEEQDPSNMTGFLRSLRSILTNEIYVIFLILTLLQVS
GFIGSFTYLFKFIEQQFGRTASQANFLLGIITPTMATAMFLGGYIVKKFKLTSVGIKAFVFFTSSVAYAF
QFLYFPLLCENKPFAGLTLYDGMNPVDSHIDVPLSYCNSDCSCDKNQWEPICGENGVTYISPCLAG
CKSFRGDKKPNNTFEYDCSCISNSGNNSAHLGECPRYKCKTNYYFYIILQVTVSFFTAMGSPSLILILM
KSVQPELKSLAMGFHSLIIRALGGILAPIYYGAFIDRTCIKWSVTSCGKRGACRLYNSRLFGFSYLGLN
LALKTPPLFLYVVLIIYFTKRKYKRNDNKLTLENGRQFTDEGNPDSVNKNGYYCVPYDEQSNETPL

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Solute carrier organic anion transporter family member 1B2 (Liver-specific organic anion transporter 1) (rLST-1) (Sodium-independent organic anion-transporting polypeptide 4) (OATP-4) (Solute carrier family 21 member 10) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Mediates the Na(+)-independent uptake of organic anions such as taurocholate, bromosulfophthalein and steroid conjugates (estrone 3-sulfate, 17-beta-glucuronosyl estradiol, dehydroepiandrosterone sulfate) (PubMed:19129463). Also transports prostaglandin E2 and L-thyroxine (T4) (PubMed:19129463). 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:19129463). Hydrogencarbonate/HCO₃⁻ acts as the probable counteranion that exchanges for organic anions (PubMed:19129463).

Subcellular Localization: Basolateral cell membrane; Multi-pass membrane protein. Note=Confined to the basolateral plasma membrane of hepatocytes.

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.