

Recombinant Mouse S15A2 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51899

Size: 10ug, 100ug

Protein Name: Solute carrier family 15 member 2 (Kidney H(+)/peptide cotransporter)
(Oligopeptide transporter, kidney isoform) (Peptide transporter 2)

Synonym: Slc15a2, Pept2

UniProt ID: Q9ES07

UniProt Link: www.uniprot.org/uniprotkb/Q9ES07/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 729 AA

Molecular Weight: 82 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MNPFQKNESKETLFSPVSTEEMLPGPPSPPKKSTPKLFGSSYPLSIAFIVNEFCERFSYYGMKAVLT
LYFLYFLHWNETSTSVYHAFSSLCYFTPILGAAIADSWLGKFKTIIYLSLVYVLGHVFKSLGAIPILGG
KMLHTILSLVGLSLIALGTGGIKPCVAAFGGDQFEEHAEARTRYFSVFYLSINAGSLISTFITPMLRGD
VKCFGEDCYALAFGIPGLLMVLALVVFAMGSKMYRKPPPEGNIVAQVTKCIWFAICNRFRNRSEDIPK
RQHWLDWAAEKYPKHLIMDVKALTRILFLYIPLPMFWALLDQQGSRWTLQANKMDGDLGFFVLQPD
QMQLVNPFLVLVFIPLFDLVIYRLISKCGVNFSSLRKMAVGMILACLAFAVAALVEIKINGMIHPQPASQ
EIFLQVLNLADGEIEVTVQGNRNPNLLVESISSFQNTTHYSKLRLETQSQDLHFHLKYNNLSVHNEYS
VEEKNCYQLVHENGESLSSMLVKDTGIKPANGMTAIRFINTLHKDMNISLDANAPLSVGKDYGVSE
YRTVQRGKYPAVHCETEDNVFSLNLGQLDFGTTYLFVITNITNRGLQAWKAEDIPANKLSIAWQLPQY
VLVTAAEVMFSVTGLEFSYSQAPSSMKSVLQAAWLLTVAVGNIIVLIVAQFSGLVQWAEFVLFSCLLL
VVCLIFSVMGYYYVPLKSEGIHEATEKQIPHIQGNMINLETKNTRL

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 family 15 member 2 (Kidney H(+)/peptide cotransporter) (Oligopeptide transporter, kidney isoform) (Peptide transporter 2) 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: Proton-coupled amino-acid transporter that transports oligopeptides of 2 to 4 amino acids with a preference for dipeptides (PubMed:11027540). Transports neutral and anionic dipeptides with a proton to peptide stoichiometry of 2:1 or 3:1 (By similarity). In kidney, involved in the absorption of circulating di- and tripeptides from the glomerular filtrate. Can also transport beta-lactam antibiotics, such as the aminocephalosporin cefadroxil, and other antiviral and anticancer drugs (By similarity). Transports the dipeptide-like aminopeptidase inhibitor bestatin (By similarity). Also able to transport carnosine (By similarity). Involved in innate immunity by promoting the detection of microbial pathogens by NOD-like receptors (NLRs) (PubMed:29784761). Mediates transport of bacterial peptidoglycans across the plasma membrane or, in macrophages, the phagosome membrane: catalyzes the transport of certain bacterial peptidoglycans, such as muramyl dipeptide (MDP), the NOD2 ligand (PubMed:29784761).

Subcellular Localization: Apical cell membrane ; Multi-pass membrane protein . Cytoplasmic vesicle, phagosome membrane ; Multi-pass membrane protein . Cell membrane ; Multi-pass membrane protein . Note=Associated with the cell membrane in resting macrophages and enriched in phagocytic cups and phagosomes after particle internalization.

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.