

Recombinant Human S26A6 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50869

Size: 10ug, 100ug

Protein Name: Solute carrier family 26 member 6 (Anion exchange transporter) (Pendrin-like protein 1) (Pendrin-L1)

Synonym: SLC26A6

UniProt ID: Q9BXS9

UniProt Link: www.uniprot.org/uniprotkb/Q9BXS9/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 759 AA

Molecular Weight: 83 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MGLADASGPRDTQALLSATQAMD LRRRDYHMERPLL NQEHLEELGRWGSAPRTHQWRTWLQCSR
ARAYALLLQHLPVLVWLP RYPVRDWLLGDLLSGLSVAIMQLPQGLAYALLAGLPPVFGLYSSFPVFI
YFLFGTSRHISVGTFAVMSVMVGSVTESLAPQALNDSMINETARDAARVQVASTLSVLVGLFQVGLG
LIHFGFVVTYLSEPLVRGYTTAAAVQVFVSQ LKYVFGLHLSSHSGPLSLIYTVLEVCWKLPQSKVGT
VTA AVAGVVLVVVKLLNDKLQQQLPMP IPEGELLTLIGATGISYGMGLKHRFEVDVVGNI PAGLVPPVA
PNTQLFSKLVGSAFTIAVVGFAIAISLGKIFALRHGYRVDSNQELVALGLSNLIGGIFQCFPVSCSMSR
SLVQESTGGNSQVAGAISSLFILLIIVKLGELFHDLPKAVLA AIIIVNLKGMLRQLSDMRSLWKANRADL
LIWLVTFTATILLNLDLGLVVAVIFSLLLVVVRTQMPHYSVLGQVPDTDIYRDVAEYSEAKEVRGVKVF
RSSATVYFANA EFYS DALKQRCGV D VDFLISQKKLLKKQEQLKLKQLQKEEKL RKQAASPKGASVS
INVNTSLED MRSNNVEDCKMMQVSSGDKMEDATANGQEDSKAPDGSTLKALGLPQPDFHSLILD LG
ALS FVDTVCLKSLKNIFHDFREIEVEVYMAACHSPVVSQLEAGHFFDASITKKHLFASVHDAVTFALQ
HPRPVPDSPVSVTRL

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 26 member 6 (Anion exchange transporter) (Pendrin-like protein 1) (Pendrin-L1) 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: Apical membrane anion-exchanger with wide epithelial distribution that plays a role as a component of the pH buffering system for maintaining acid-base homeostasis. Acts as a versatile DIDS-sensitive inorganic and organic anion transporter that mediates the uptake of monovalent anions like chloride, bicarbonate, formate and hydroxyl ion and divalent anions like sulfate and oxalate. Functions in multiple exchange modes involving pairs of these anions, which include chloride-bicarbonate, chloride-oxalate, oxalate-formate, oxalate-sulfate and chloride-formate exchange. Apical membrane chloride-bicarbonate exchanger that mediates luminal chloride absorption and bicarbonate secretion by the small intestinal brush border membrane and contributes to intracellular pH regulation in the duodenal upper villous epithelium during proton-coupled peptide absorption, possibly by providing a bicarbonate import pathway. Also mediates intestinal chloride absorption and oxalate secretion, thereby preventing hyperoxaluria and calcium oxalate urolithiasis. Transepithelial oxalate secretion, chloride-formate, chloride-oxalate and chloride-bicarbonate transport activities in the duodenum are inhibited by PKC activation in a calcium-independent manner. The apical membrane chloride-bicarbonate exchanger also provides a major route for fluid and bicarbonate secretion into the proximal tubules of the kidney as well as into the proximal part of the interlobular pancreatic ductal tree, where it mediates electrogenic chloride-bicarbonate exchange with a chloride-bicarbonate stoichiometry of 1:2, and hence will dilute and alkalinize protein-rich acinar secretion. Also mediates the transcellular sulfate absorption and oxalate secretion across the apical membrane in the duodenum and the formate ion efflux at the apical brush border of cells in the proximal tubules of kidney. Plays a role in sperm capacitation by increasing intracellular pH.; [Isoform 4]: Apical membrane chloride-bicarbonate exchanger. Its association with carbonic anhydrase CA2 forms a bicarbonate transport metabolon; hence maximizes the local concentration of bicarbonate at the transporter site.

Subcellular Localization: Cell membrane ; Multi-pass membrane protein . Apical cell membrane ; Multi-pass membrane protein . Cytoplasmic vesicle membrane ; Multi-pass membrane protein . Microsome . Note=Localized in sperm membranes. Colocalizes with CFTR at the midpiece of sperm tail. Localizes to the apical membrane brush border of epithelial cells in the proximal tubules of kidney, of enterocytes of the small intestine and of gastric parietal cells in the stomach.; [Isoform 4]: Cell membrane ; Multi-pass membrane protein . Apical cell membrane ; Multi-pass membrane protein . Basolateral cell membrane ; Multi-pass membrane protein . Note=Localizes to the apical and basolateral surfaces of tubular wall cells in kidney and in the brush border of pancreatic duct cells (PubMed:11087667). Colocalized with CA2 at the surface of the cell membrane in order to form a bicarbonate transport metabolon; colocalization is reduced in phorbol myristate acetate (PMA)-induced cells (PubMed:15990874). May be translocated from the cytosolic surface of the cell membrane to the intracellular space by PKC in phorbol myristate acetate (PMA)-induced cells

(PubMed:15990874).; [Isoform 5]: Cell membrane ; Multi-pass membrane protein .; [Isoform 6]: Cell membrane ; Multi-pass membrane protein .

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.