Datasheet for ABIN3117841

SLC26A6 Protein (AA 1-759) (rho-1D4 tag)

1 Image

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Overview

Quantity:	1 mg
Target:	SLC26A6
Protein Characteristics:	AA 1-759
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC26A6 protein is labelled with rho-1D4 tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

Product Details

Sequence: MGLADASGPR DTQALLSATQ AMDLRRRDYH MERPLLNQEH LEELGRWGSA PRTHQWRTWL QCSRARAYAL LLQHLPVLVW LPRYPVRDWL LGDLLSGLSV AIMQLPQGLA YALLAGLPPV FGLYSSFYPV FIYFLFGTSR HISVGTFAVM SVMVGSVTES LAPQALNDSM INETARDAAR VQVASTLSVL VGLFQVGLGL IHFGFVVTYL SEPLVRGYTT AAAVQVFVSQ LKYVFGLHLS SHSGPLSLIY TVLEVCWKLP QSKVGTVVTA AVAGVVLVVV KLLNDKLQQQ LPMPIPGELL TLIGATGISY GMGLKHRFEV DVVGNIPAGL VPPVAPNTQL FSKLVGSAFT IAVVGFAIAI SLGKIFALRH GYRVDSNQEL VALGLSNLIG GIFQCFPVSC SMSRSLVQES TGGNSQVAGA ISSLFILLII VKLGELFHDL PKAVLAAIII VNLKGMLRQL SDMRSLWKAN RADLLIWLVT FTATILLNLD LGLVVAVIFS LLLVVVRTQM PHYSVLGQVP DTDIYRDVAE YSEAKEVRGV KVFRSSATVY FANAEFYSDA LKQRCGVDVD FLISQKKKLL KKQEQLKLKQ LQKEEKLRKQ AASPKGASVS INVNTSLEDM RSNNVEDCKM MQVSSGDKME DATANGQEDS KAPDGSTLKA LGLPQPDFHS LILDLGALSF VDTVCLKSLK NIFHDFREIE VEVYMAACHS PVVSQLEAGH FFDASITKKH

Product Details

	LFASVHDAVT FALQHPRPVP DSPVSVTRL **Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a special request, please contact us.**
Characteristics:	• Made in Germany - from design to production - by highly experienced protein experts. • Human SLC26A6 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade. • 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 will ensure that you receive a correctly folded protein. 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. In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization). When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered. The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer. The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.
Purification:	Three step purification of membrane proteins expressed in baculovirus infected SF9 insect cells: 1. Membrane proteins are fractioned by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot. 2. The best performing detergent is used for solubilization and the proteins are purified via their rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate fractions are analyzed by Western blot. 3. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatograph. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Sterility:	0.22 µm filtered

Product Details

Endotoxin Level:	Protein is endotoxin-free.
Grade:	Crystallography grade

Target Details

Target:	SLC26A6
Alternative Name:	SLC26A6 (SLC26A6 Products)
Background:	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. Function 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. Mediates also 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 provides also 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. Mediates also 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.
Molecular Weight:	84.1 kDa Including tag.
UniProt:	Q9BXS9
Pathways:	Dicarboxylic Acid Transport

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a gurantee though.
Comment:	In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you receive your protein of interest.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value 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:	Unlimited (if stored properly)

Images

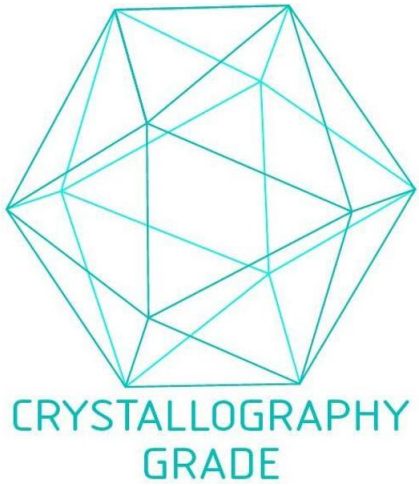

Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process