

Datasheet for ABIN7554763 **SLC11A2 Protein (AA 1-568) (His tag)**



Overview

| Quantity: | 1 mg |
|-------------------------------|--|
| Target: | SLC11A2 |
| Protein Characteristics: | AA 1-568 |
| Origin: | Human |
| Source: | HEK-293 Cells |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This SLC11A2 protein is labelled with His tag. |

Product Details

| Product Details | |
|-----------------|---|
| Purpose: | Custom-made recombinant SLC11A2 Protein expressed in mammalian cells. |
| Sequence: | MVLGPEQKMS DDSVSGDHGE SASLGNINPA YSNPSLSQSP GDSEEYFATY FNEKISIPEE |
| | EYSCFSFRKL WAFTGPGFLM SIAYLDPGNI ESDLQSGAVA GFKLLWILLL ATLVGLLLQR |
| | LAARLGVVTG LHLAEVCHRQ YPKVPRVILW LMVELAIIGS DMQEVIGSAI AINLLSVGRI |
| | PLWGGVLITI ADTFVFLFLD KYGLRKLEAF FGFLITIMAL TFGYEYVTVK PSQSQVLKGM |
| | FVPSCSGCRT PQIEQAVGIV GAVIMPHNMY LHSALVKSRQ VNRNNKQEVR EANKYFFIES |
| | CIALFVSFII NVFVVSVFAE AFFGKTNEQV VEVCTNTSSP HAGLFPKDNS TLAVDIYKGG |
| | VVLGCYFGPA ALYIWAVGIL AAGQSSTMTG TYSGQFVMEG FLNLKWSRFA RVVLTRSIAI |
| | IPTLLVAVFQ DVEHLTGMND FLNVLQSLQL PFALIPILTF TSLRPVMSDF ANGLGWRIAG |
| | GILVLIICSI NMYFVVVYVR DLGHVALYVV AAVVSVAYLG FVFYLGWQCL IALGMSFLDC |
| | GHTCHLGLTA QPELYLLNTM DADSLVSR Sequence without tag. 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 |

Product Details

| | 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: | SLC11A2 |
| Alternative Name: | SLC11A2 (SLC11A2 Products) |
| Background: | Natural resistance-associated macrophage protein 2 (NRAMP 2) (Divalent cation transporter 1 (Divalent metal transporter 1) (DMT-1) (Solute carrier family 11 member 2),FUNCTION: Proton-coupled metal ion symporter operating with a proton to metal ion stoichiometry of 1:1 (PubMed:17109629, PubMed:22736759, PubMed:25491917, PubMed:17293870, PubMed:25326704). Selectively transports various divalent metal cations, in decreasing affinity |
| | Cd(2+) > Fe(2+) > Co(2+), Mn(2+) >> Zn(2+), Ni(2+), VO(2+) (PubMed:17109629, |
| | PubMed:22736759, PubMed:25491917, PubMed:17293870, PubMed:25326704). Essential for maintenance of iron homeostasis by modulating intestinal absorption of dietary Fe(2+) and TF |
| | |

associated endosomal Fe(2+) transport in erythroid precursors and other cells (By similarity).

Enables Fe(2+) and Mn(2+) ion entry into mitochondria, and is thus expected to promote

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|------------------------|---|
| | mitochondrial heme synthesis, iron-sulfur cluster biogenesis and antioxidant defense (PubMed:24448823) (By similarity). Can mediate uncoupled fluxes of either protons or metal ions. {ECO:0000250 UniProtKB:054902, ECO:0000250 UniProtKB:P49282, ECO:0000269 PubMed:17109629, ECO:0000269 PubMed:17293870, ECO:0000269 PubMed:22736759, ECO:0000269 PubMed:24448823, ECO:0000269 PubMed:25326704, ECO:0000269 PubMed:25491917}. |
| Molecular Weight: | 62.3 kDa |
| UniProt: | P49281 |
| Pathways: | Transition Metal Ion Homeostasis, Proton Transport, Positive Regulation of Endopeptidase Activity |
| 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: Handling | For Research Use only |
| 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 |