

Datasheet for ABIN7555380  
**SLC22A5 Protein (AA 1-557) (His tag)**



[Go to Product page](#)

## Overview

Quantity:	1 mg
Target:	SLC22A5
Protein Characteristics:	AA 1-557
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SLC22A5 protein is labelled with His tag.

## Product Details

Purpose:	Custom-made recombinant SLC22A5 Protein expressed in mammalian cells.
Sequence:	MRDYDEVTAFLGEWGPFQRLIFFLLSASII PNGFTGLSSV FLIATPEHRC RVPDAANLSS AWRNHTVPLRLRDGREVPHS CRRYRLATIA NFSALGLEPG RDVDLGLQLEQ ESCLDGWEFS QDVYVLTIVT EWNLVCEDDW KAPLTISLFF VGVLLGSFIS GQLSDRFGRK NVLFVTMGMQ TGFSFLQIFS KNFEMFVVLFLVGMGQISN YVAAFVLGTE ILGKSVRIIF STLGVCIFYA FGYMLPLFAYFIRDWRMLL VALTMPGVLC VALWWFIPES PRWLISQGRF EAEVIIRKA AKANGIVVPS TIFDPSELQD LSSKKQQSHN ILDLLRTWNI RMVTIMSIML WMTISVGYFG LSLDTPNLHG DIFVNCFLSA MVEVPAYVLA WLLLQYLPRR YSMATALFLG GSVLLFMQLV PPDLYLATV LVMVGKFGVT AAFSMVYVYT AELYPTVVRN MGVGVSSTAS RLGSILSPYF VYLGAYDRFL PYILMGSLTI LTAILTLFLP ESFGTLPDPT IDQMLRVKGM KHRKTPSHTR MLKDGQERPT ILKSTAF <b>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 contact us.</b>

## Product Details

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**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.

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**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.

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**Purity:** > 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

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**Grade:** custom-made

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## Target Details

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**Target:** SLC22A5

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**Alternative Name:** SLC22A5 ([SLC22A5 Products](#))

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**Background:** Organic cation/carnitine transporter 2 (High-affinity sodium-dependent carnitine cotransporter) (Solute carrier family 22 member 5),FUNCTION: Sodium-ion dependent, high affinity carnitine transporter. Involved in the active cellular uptake of carnitine. Transports one sodium ion with one molecule of carnitine (PubMed:10454528, PubMed:10525100, PubMed:10966938, PubMed:17509700, PubMed:20722056, PubMed:33124720). Also transports organic cations such as tetraethylammonium (TEA) without the involvement of sodium. Relative uptake activity ratio of carnitine to TEA is 11.3 (PubMed:10454528, PubMed:10525100, PubMed:10966938). In intestinal epithelia, transports the quorum-sensing pentapeptide CSF (competence and sporulation factor) from Bacillus Subtilis wich induces cytoprotective heat shock proteins contributing to intestinal homeostasis (PubMed:18005709). May also contribute to regulate the transport of organic compounds in testis across the blood-testis-barrier (Probable).

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## Target Details

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{ECO:0000269|PubMed:10454528, ECO:0000269|PubMed:10525100, ECO:0000269|PubMed:10966938, ECO:0000269|PubMed:17509700, ECO:0000269|PubMed:18005709, ECO:0000269|PubMed:20722056, ECO:0000305|PubMed:35307651}., FUNCTION: [Isoform 3]: Retained in the ER, unable to perform carnitine uptake. {ECO:0000269|PubMed:17509700}.

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Molecular Weight: 62.8 kDa

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UniProt: [O76082](#)

## Application Details

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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.

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Restrictions: For Research Use only

## Handling

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Format: Liquid

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Buffer: The buffer composition is at the discretion of the manufacturer.

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Handling Advice: Avoid repeated freeze-thaw cycles.

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Storage: -80 °C

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Storage Comment: Store at -80°C.

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Expiry Date: 12 months