

Datasheet for ABIN7555292

KCC2 Protein (AA 1-1139) (His tag)[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	KCC2 (SLC12A5)
Protein Characteristics:	AA 1-1139
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This KCC2 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant SLC12A5 Protein expressed in mammalian cells.
Sequence:	MSRRFTVTSL PPAGPARSPD PESRRHSVAD PRHLPGEDVK GDGNPKESSP FINSTDTEKG KEYDGKNMAL FEEEMDTSPM VSSLLSGLAN YTNLPQGSRE HEEAENNEG KKKPVQAPRM GTFMGVYLPC LQNIFGVILF LRLTWVVGIA GIMESFCMVF ICCSCTMLTA ISMSAIATNG VVPAGGSYYM ISRSLGPEFG GAVGLCFYLG TTFAGAMYIL GTIEILLAYL FPAMAIFKAE DASGEAAAML NNMRVYGTCV LTCMATVVFV GVKYVNKFAL VFLGCVILSI LAIYAGVIKS AFDPPNFPIC LLGNRTLNRH GFDVCAKLAW EGNETVTRL WGLFCSSRFL NATCDEYFTR NNVTEIQGIP GAASGLIKEN LWSSYLTKGV IVERSGMTSV GLADGTPIDM DHPYVFSDMT SYFTLLVGIY FPSVTGIMAG SNRSGDLRDA QKSIPTGTIL AIATTSAVYI SSVVLFGACI EGVVLRLDKFG EAVNGNLVVG TLAWPSPWVI VIGSFFSTCG AGLQSLTGAP RLLQAISR DG IVPFLQVFGH GKANGEPTWA LLLTACICEI GILIASLDEV APILSMFFLM CYMFVNLACA VQTLRLTPNW RPRFRYYHWT LSFLGMSLCL ALMFICSWYY ALVAMLIAGL IYKYIEYRGA EKEWGDGIRG LSLSAARYAL LRLEEGPPHT KNWRPQLLV LVRVDQDQNVV HPQLLSLTSQ

LKAGKGLTIV GSVLEGTFL NHPQAQRAEE SIRRLMEAEK VKGFCQVVIS SNLRDGVSHL
IQSGGLGGLQ HNTVLVGWPR NWRQKEDHQT WRNFIELVRE TTAGHLALLV TKNVSMFPGN
PERFSEGSID VWWIVHDGGM LMLLPFLLRH HKVWRKCKMR IFTVAQMDDN SIQMKKDLTT
FLYHLRITAE VEVVEMHESD ISAYTYEKT VMEQRSQILK QMHLTKNERE REIQSITDES
RGSIRRNPA NTRLRLNVPE ETAGDSECKP EEEVQLIHDQ SAPSCPSSSP SPGEEPEGEG
ETDPEKVHLT WTKDKSVAEK NKGPSVPSSE GIKDFFSMKP EWENLNQSNV RRMHTAVRLN
EVIVKKSRDA KLVLLNMPGP PRNRNGDENY MEFLEVLTEH LDRVMLVRGG GREVITIYS

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.

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: KCC2 (SLC12A5)

Alternative Name: SLC12A5 ([SLC12A5 Products](#))

Background: Solute carrier family 12 member 5 (Electroneutral potassium-chloride cotransporter 2) (K-Cl

Target Details

cotransporter 2) (hKCC2) (Neuronal K-Cl cotransporter),FUNCTION: Mediates electroneutral potassium-chloride cotransport in mature neurons and is required for neuronal Cl(-) homeostasis (PubMed:12106695). As major extruder of intracellular chloride, it establishes the low neuronal Cl(-) levels required for chloride influx after binding of GABA-A and glycine to their receptors, with subsequent hyperpolarization and neuronal inhibition (By similarity). Involved in the regulation of dendritic spine formation and maturation (PubMed:24668262). {ECO:0000250|UniProtKB:Q63633, ECO:0000269|PubMed:12106695, ECO:0000269|PubMed:24668262}.

Molecular Weight: 126.2 kDa

UniProt: [Q9H2X9](#)

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: For Research Use only

Handling

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