

Recombinant Human S12A3 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50866

Size: 10ug, 100ug

Protein Name: Solute carrier family 12 member 3 (Na-Cl cotransporter) (NCC) (Na-Cl symporter) (Thiazide-sensitive sodium-chloride cotransporter)

Synonym: SLC12A3, NCC, TSC

UniProt ID: P55017

UniProt Link: www.uniprot.org/uniprotkb/P55017/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 1021 AA

Molecular Weight: 113 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAELPTTETPGDATLCSGRFTISTLLSSDEPSPPAAYDSSHPSHLTHSSTFCMRTFGYNTIDVVPTYE
HYANSTQPGEPKRVRPTLADLHSFLKQEGRHLHALAFDSRPSHEMTDGLVEGEAGTSSEKNPEEPV
RFGWVKGVMIRCMLNIWGVILYLRLPWITAQAGIVLTWIIILLSVTVTSITGLSISAISTNGKVKSGGTYF
LISRSLGPELGGSIGLIFAFANAVGVAMHTVGFAETVRDLLQEYGAPIVDPINDIRIIAVVSVTVLLAISLA
GMEWESKAQVLFFLVIMVSFANYLVGTLIPPSSEDKASKGFFSYRADIFVQNLVPDWRGPDGTFFGMF
SIFFPSATGILAGANISGDLKDPAAIPKGTLMAlFWTTISYLAISATIGSCVVRDASGVLNDTVTPGWGA
CEGLACSYGWNFTECTQQHSCHYGLINYYQTMSMVSGFAPLITAGIFGATLSSALACLVSAAKVFQC
LCEDQLYPLIGFFGKGYGKNEKPVRGYLLAYAI AVAFIIIAELNTI APIISNFFLCSYALINFSCFHASITNS
PGWRPSFQYYNKWAALFGAISVVMFLLTWWAALIAIGVVLFLLYVIYKKPEVNWGSSVQAGSYNL
ALSYSVGLNEVEDHIKNYRPQCLVLTGPPNFRPALVDVFGTFTRNLSLMICGHVLIGPHKQRMPELQL
IANGHTKWLNKRKIKAFYSDVIAEDLRGVQILMQAAGLGRMKPNILVVGFKKNWQSAHPATVEDYI
GILHDAFDFNYGVCVMRMREGLNVSKMMQAHINPVFDPAEDGKEASARVDPKALVKEEQATTIFQS
EQGKKTIDIYWLFDGGLTLLIPYLLGRKRRWSKCKIRVFVGGQINRMDQERKAIISLLSKFRLGFHEV
HILPDINQNPRAEHTKRFEDMIAPFRLNDGFKDEATVNEMRRDCPWKISDEEITKNRVKSLRQVRLNE
IVLDYSRDAALIVITLPIGRKGKCPSSLYMAWLETLSQDLRPPVILIRGNQENVLTFFYCQ

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 12 member 3 (Na-Cl cotransporter) (NCC) (Na-Cl symporter) (Thiazide-sensitive sodium-chloride cotransporter) 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: Electroneutral sodium and chloride ion cotransporter, which acts as a key mediator of sodium and chloride reabsorption in kidney distal convoluted tubules (PubMed:18270262, PubMed:21613606, PubMed:22009145, PubMed:36351028, PubMed:36792826). Also acts as a receptor for the pro-inflammatory cytokine IL18, thereby contributing to IL18-induced cytokine production, including IFNG, IL6, IL18 and CCL2 (By similarity). May act either independently of IL18R1, or in a complex with IL18R1 (By similarity).

Subcellular Localization: Cell membrane ; Multi-pass membrane protein . Apical 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.