

Recombinant Mouse S12A3 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51482

Size: 10ug, 100ug

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

Synonym: Slc12a3, Ncc, Tsc

UniProt ID: P59158

UniProt Link: www.uniprot.org/uniprotkb/P59158/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 1002 AA

Molecular Weight: 111 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAELPVTELPGDALCSGRFTISTLMGGDEPPPAACDSSQPSHLTHGSTLYMRTFGYNTIDVVPAYEH
YANSALPGEPRKVRPTLADLHSLKQEGSHLHALAFDGRQGRELTDGLVEDETGTNSEKSPGEPVR
FGWVKGVMIRCMLNIWGVILYLRLPWITAQAGIVLTWLIILLSVMVTSITGLSISAISTNGKVKSGGTYFL
ISRLGPELGGSIGLIFAFANAVGVAMHTVGFAETVRDLLQEYGTPIVDPINDIRIIGVTVTVLLAISLA
GMEWESKAQVLFFLVIMVSFANYLVGTLIPASEDKASKGFYSYHGDIFVQNLVPDWRGIDGSFFGMF
SIFFPSATGILAGANISGDLKDPVAIPAIPKGTLMAlFWTTISYLAISATIGSCVVRDASGDVNDTMTPGPG
PCEGLACGYGWNFTECSQQRSCRYGLINYYQTMSMVSAFAPLITAGIFGATLSSALACLVSAAKV FQ
CLCEDQLYPLIGFFGKGYGKNREPVRGYLLAYAI AVAFIIIAELNTI APIISNFFLC SYALINFSCFHASITN
SPGWRPSFRYYSKWAALFGAVISVIMFLLTWWAALIAIGVVLFLLLYVIYKKPEVNWGSSVQAGSYN
LALSYSVGLNEVEDHIKNYRPQCLVLTGPPNFRPALVDFVSTFTQNL SLMICGHVLIGPGKQRPVELR
LIASGHTKWLNRKRIKAFYSDVIAEDLRSGVQILMQASGLGRMKPNILVVGFKRNWQSAHPATVEDYI
GVLHDAFDFNYGVCVMRMREGLNVSEALQTHHTPEALIQEEQASTIFQSEQGKKTIIDYWLFDGGL
TLLIPYLLHRKKRWGKCKIRVFVGGQINRMDEERKAIISLLSKFRLGFHEVHVLPDINQKPQAEHTKRF
EDMIAPFRLNDGFKDEATVTEMRRDCPWKISDEEINKNRIKSLRQVRLSEILLDYSRDAALIILTLPIGR
KGKCPSSLYMAWLETLSQDLRPPVLLIRGNQENVLTFYCQ

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 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:15068971, PubMed:17488636, PubMed:19633012, PubMed:36370249). Also acts as a receptor for the pro-inflammatory cytokine IL18, thereby contributing to IL18-induced cytokine production, including IFNG, IL6, IL18 and CCL2 (PubMed:26099046). May act either independently of IL18R1, or in a complex with IL18R1 (PubMed:26099046).

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.