Recombinant Human SLC12A1 protein, His & T7-tagged

Cat. No. SLC12A1-1202H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human SLC12A1 aa. (Arg814~Ser1099 (Accession # Q13621) fused with N-terminal His & T7 tag was produced in E. coli cells.
Species	Human
Source	E.coli
ProteinLength	Arg814~Ser1099
Description	This gene encodes a kidney-specific sodium-potassium-chloride cotransporter that is expressed on the luminal membrane of renal epithelial cells of the thick ascending limb of Henle's loop and the macula densa. It plays a key role in concentrating urine and accounts for most of the NaCl resorption. It is sensitive to such diuretics as furosemide and bumetanide. Some Bartter-like syndromes result from defects in this gene. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Additional splice variants have been described but their biological validity in humans has not been experimentally proven.
Form	Freeze-dried powder
Molecular Mass	Predicted Molecular Mass: 36.8kDa.
Endotoxin	<1.0EU per 1μg (determined by the LAL method)
Purity	>95%

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Characteristic	The isoelectric point is 9.0.
Applications	SDS-PAGE; WB; ELISA; IP.
Stability	The thermal stability is described by the loss rate of the target protein. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. (Referring from China Biological Products Standard, which was calculated by the Arrhenius equation.) The loss of this protein is less than 5% within the expiration date under appropriate storage condition.
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.
Storage buffer	Supplied as lyophilized form in PBS, pH7.4, containing 5% trehalose, 0.01% sarcosyl.
Reconstitution	Reconstitute in sterile PBS, pH7.2-pH7.4.

GENE INFORMATION

Gene Name	SLC12A1 solute carrier family 12 member 1 [Homo sapiens (human)]
Official Symbol	SLC12A1
Synonyms	SLC12A1; solute carrier family 12 member 1; BSC1; NKCC2; NKCC2A variant A; Na-K-2Cl cotransporter; bumetanide-sensitive sodium-(potassium)-chloride cotransporter 2; kidney-specific Na-K-Cl symporter; solute carrier family 12 (sodium/potassium/chloride transporter), member 1; solute carrier family 12 (sodium/potassium/chloride transporters), member 1
Gene ID	6557

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mRNA Refseq	NM_000338.2
Protein Refseq	NP_000329.2
UniProt ID	Q13621

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