

Recombinant human SLC12A3 protein, N-His Tag

Catalog Number: bs-42015P

Concentration: >0.5 mg/ml

AA Seq: 1-135/1021

Predicted MW: 20

Tags: N-His Tag

Activity: Not tested

Endotoxin: Not analyzed

Purity: >90% as determined by SDS-PAGE

Purification: AC

Form: Lyophilized or Liquid

Storage: PBS (pH7.4) with 250mM NaCl.

Stored at -70°C or -20°C. Avoid repeated freeze/thaw cycles.

Background: Na-K-Cl cotransporters (NKCC) are channel proteins that aid in the transcellular movement of chloride across both secretory and absorptive epithelia. NKCC1 is expressed in muscle cells, neurons, and red blood cells. In the basolateral membrane of secretory epithelia, NKCC1 mediates active chloride secretion. The gene encoding human NKCC1 maps to chromosome 5q23.3. In mice, disruption of the NKCC1 gene leads to deafness and impaired balance. NKCC2 is specifically expressed in the kidney where it mediates active reabsorption of sodium chloride in the thick ascending limb of the loop of Henle. NKCC2 is sensitive to the clinically important diuretics furosemide and bumetanide. The gene encoding human NKCC2 maps to chromosome 15q15-q21 and mutations in this gene lead to Bartter's syndrome, an inherited hypokalaemic alkalosis. NCCT is a thiazide-sensitive Na-Cl cotransporter that is primarily expressed in the distal convoluted tubule of the kidney where it accounts for a significant fraction of net renal sodium reabsorption. The gene for human NCCT map to chromosome 16q13. Mutations in the gene encoding NCCT cause Gitelman's syndrome, a subset of Bartter's syndrome.

VALIDATION IMAGES



The purity of the protein is greater than 81% as determined by reducing SDS-PAGE.