

SLC12A3 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP12230a**Specification**

SLC12A3 Antibody (N-term) Blocking peptide - Product InformationPrimary Accession [P55017](#)**SLC12A3 Antibody (N-term) Blocking peptide - Additional Information****Gene ID** 6559**Other Names**

Solute carrier family 12 member 3, Na-Cl cotransporter, NCC, Na-Cl symporter, Thiazide-sensitive sodium-chloride cotransporter, SLC12A3, NCC, TSC

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SLC12A3 Antibody (N-term) Blocking peptide - Protein Information**Name** SLC12A3 {ECO:0000303|PubMed:8812482, ECO:0000312|HGNC:HGNC:10912}**Function**

Electroneutral sodium and chloride ion cotransporter, which acts as a key mediator of sodium and chloride reabsorption in kidney distal convoluted tubules (PubMed:21613606, PubMed:18270262, 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).

Cellular Location

Cell membrane; Multi-pass membrane protein. Apical cell membrane {ECO:0000250|UniProtKB:P59158}; Multi-pass membrane protein

Tissue Location

Predominantly expressed in the kidney (at protein level) (PubMed:29993276, PubMed:8812482).

Localizes to the distal convoluted tubules (at protein level)(PubMed:29993276). Not detected in normal aorta, but abundantly expressed in fatty streaks and advanced atherosclerotic lesions (at protein level) (PubMed:26099046)

SLC12A3 Antibody (N-term) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

SLC12A3 Antibody (N-term) Blocking peptide - Images

SLC12A3 Antibody (N-term) Blocking peptide - Background

This gene encodes a renal thiazide-sensitive sodium-chloride cotransporter that is important for electrolyte homeostasis. This cotransporter mediates sodium and chloride reabsorption in the distal convoluted tubule. Mutations in this gene cause Gitelman syndrome, a disease similar to Bartter's syndrome, that is characterized by hypokalemic alkalosis combined with hypomagnesemia, low urinary calcium, and increased renin activity associated with normal blood pressure. This cotransporter is the target for thiazide diuretics that are used for treating high blood pressure. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq].

SLC12A3 Antibody (N-term) Blocking peptide - References

Bailey, S.D., et al. Diabetes Care (2010) In press :Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Zhou, B., et al. J. Am. Soc. Nephrol. 21(1):82-92(2010)Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)Ridker, P.M., et al. Circ Cardiovasc Genet 2(1):26-33(2009)