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SLC12A3 Antibody (N-term) Blocking peptide

Synthetic peptide
Catalog # BP12230a

Specification

SLC12A3 Antibody (N-term) Blocking peptide - Product Information

Primary 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-sensitivesodium-chloride cotransporter that is important for electrolytehomeostasis. This cotransporter mediates sodium and chloridereabsorption in the distal convoluted tubule. Mutations in thisgene cause Gitelman syndrome, a disease similar to Bartter'ssyndrome, that is characterized by hypokalemic alkalosis combinedwith hypomagnesemia, low urinary calcium, and increased reninactivity associated with normal blood pressure. This cotransporteris the target for thiazide diuretics that are used for treatinghigh blood pressure. Multiple transcript variants encodingdifferent isoforms have been found for this gene. [provided byRefSeq].

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)