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SLC5A8 antibody - middle region
Rabbit Polyclonal Antibody
Catalog # AI12377

Specification

SLC5A8 antibody - middle region - Product Information

Application	**WB**
Primary Accession	Q8N695
Other Accession	NM_145913, NP_666018
Reactivity	**Human, Mouse, Rat, Rabbit**
Predicted	**Rat, Rabbit**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**66kDa KDa**

SLC5A8 antibody - middle region - Additional Information

Gene ID 160728

Alias Symbol	**AIT, MGC125354, SMCT, SMCT1**

Other Names
Sodium-coupled monocarboxylate transporter 1, Apical iodide transporter, Electrogenic sodium monocarboxylate cotransporter, Sodium iodide-related cotransporter, Solute carrier family 5 member 8, SLC5A8 {ECO:0000312|EMBL:AAP46193.1}

Format
Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage
Add 50 ul of distilled water. Final anti-SLC5A8 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions
SLC5A8 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

SLC5A8 antibody - middle region - Protein Information

Name SLC5A8 {ECO:0000312|EMBL:AAP46193.1}

Function
Acts as an electrogenic sodium (Na(+)) and chloride (Cl-)- dependent sodium-coupled solute transporter, including transport of monocarboxylates (short-chain fatty acids including L-lactate, D-lactate, pyruvate, acetate, propionate, valerate and butyrate), mocarboxylate drugs (nicotinate, benzoate, salicylate and 5- aminosalicylate) and ketone bodies (beta-D-hydroxybutyrate, acetoacetate and alpha-ketoisocaproate), with a Na(+):substrate stoichiometry of between 4:1 and 2:1 (PubMed:14966140, PubMed:<a href="http://www.uniprot.org/citations/15090606"

target="_blank">15090606, PubMed:16729224, PubMed:16805814, PubMed:17178845, PubMed:17245649, PubMed:17526579, PubMed:20211600, PubMed:30604288). Catalyzes passive carrier mediated diffusion of iodide (PubMed:12107270). Mediates iodide transport from the thyrocyte into the colloid lumen through the apical membrane (PubMed:12107270). May be responsible for the absorption of D- lactate and monocarboxylate drugs from the intestinal tract (PubMed:17245649). Acts as a tumor suppressor, suppressing colony formation in colon cancer, prostate cancer and glioma cell lines (PubMed:12829793, PubMed:15867356, PubMed:18037591). May play a critical role in the entry of L-lactate and ketone bodies into neurons by a process driven by an electrochemical Na(+) gradient and hence contribute to the maintenance of the energy status and function of neurons (PubMed:16805814). Mediates sodium-coupled electrogenic transport of pyroglutamate (5-oxo-L-proline) (PubMed:20211600). Can mediate the transport of chloride, bromide, iodide and nitrate ions when the external concentration of sodium ions is reduced (PubMed:19864324).

Cellular Location
Apical cell membrane; Multi-pass membrane protein. Note=Expressed at the apical membrane of normal tall thyrocytes and of colonic epithelial cells

Tissue Location
Expressed in normal thyroid, localized at the apical pole of thyroid cells facing the colloid lumen, but expression profoundly decreased in thyroid carcinomas. Expressed in normal colon but absent in colon aberrant crypt foci and colon cancers. Present in normal kidney cortex, brain, prostate, gastric mucosa and breast tissue but was significantly down-regulated in primary gliomas, gastric cancer, prostate tumors and breast tumors

SLC5A8 antibody - middle region - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SLC5A8 antibody - middle region - Images

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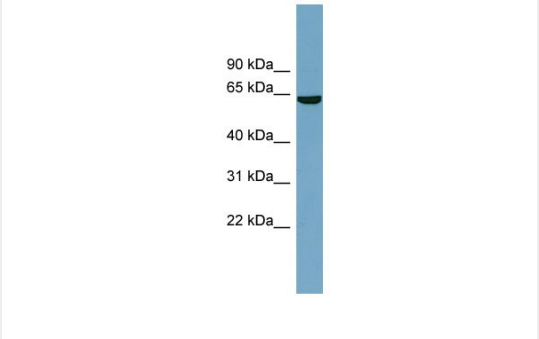

WB Suggested Anti-SLC5A8 Antibody Titration: 0.2-1 µg/ml
Positive Control: OVCAR-3 cell lysate