

SLC5A8 Antibody (C-Term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22009b

Specification

SLC5A8 Antibody (C-Term) - Product Information

Application	WB,E
Primary Accession	Q8N695
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	66578

SLC5A8 Antibody (C-Term) - Additional Information

Gene ID 160728

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}

Target/Specificity

This SLC5A8 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 579-609 amino acids from the human SLC5A8.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

SLC5A8 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

SLC5A8 Antibody (C-Term) - 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), monocarboxylate 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:[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

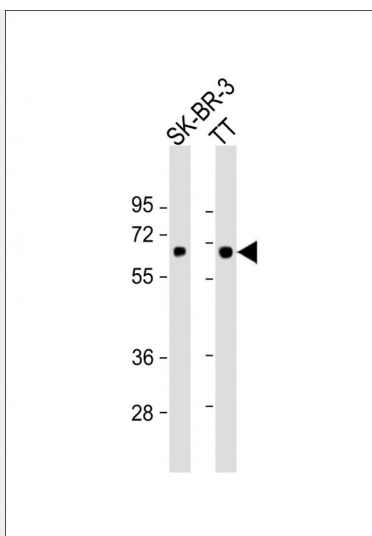
SLC5A8 Antibody (C-Term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SLC5A8 Antibody (C-Term) - Images





All lanes : Anti-SLC5A8 Antibody (C-Term) at 1:1000 dilution Lane 1: SK-BR-3 whole cell lysate
Lane 2: TT whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG,
(H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 67 kDa Blocking/Dilution
buffer: 5% NFD/MTBST.

SLC5A8 Antibody (C-Term) - Background

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), lactate, monocarboxylate 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. Catalyzes passive carrier mediated diffusion of iodide. Mediates iodide transport from the thyrocyte into the colloid lumen through the apical membrane. May be responsible for the absorption of D- lactate and monocarboxylate drugs from the intestinal tract. Acts as a tumor suppressor, suppressing colony formation in colon cancer, prostate cancer and glioma cell lines. 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.

SLC5A8 Antibody (C-Term) - References

Rodriguez A.-M., et al. J. Clin. Endocrinol. Metab. 87:3500-3503(2002).
Li H., et al. Proc. Natl. Acad. Sci. U.S.A. 100:8412-8417(2003).
Miyachi S., et al. J. Biol. Chem. 279:13293-13296(2004).
Coady M.J., et al. J. Physiol. (Lond.) 557:719-731(2004).
Scherer S.E., et al. Nature 440:346-351(2006).