

Mouse Slc5a8 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19791b

Specification

Mouse Slc5a8 Antibody (C-term) - Product Information

Application WB,E **Primary Accession** O8BYF6 NP 663398.2 Other Accession Reactivity Mouse Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 66766 Antigen Region 548-574

Mouse Slc5a8 Antibody (C-term) - Additional Information

Gene ID 216225

Other Names

Sodium-coupled monocarboxylate transporter 1, Electrogenic sodium monocarboxylate cotransporter, Solute carrier family 5 member 8, Slc5a8 {ECO:0000312|MGI:MGI:2384916}

Target/Specificity

This Mouse SIc5a8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 548-574 amino acids from the C-terminal region of mouse SIc5a8.

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

Mouse Slc5a8 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Mouse Slc5a8 Antibody (C-term) - Protein Information

Name Slc5a8 {ECO:0000312|MGI:MGI:2384916}

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:15322102, PubMed:15651982, PubMed:20211600). Catalyzes passive carrier mediated diffusion of iodide (By similarity). Mediates iodide transport from the thyrocyte into the colloid lumen through the apical membrane (By similarity). May be responsible for the absorption of D-lactate and monocarboxylate drugs from the intestinal tract (By similarity). 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 (By similarity). 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 external concentration of sodium ions is reduced (By similarity).

Cellular Location

Apical cell membrane; Multi-pass membrane protein. Note=Restricted to the apical cell membrane of enterocytes.

Tissue Location

Expressed in brain, colon, kidney and in the ileum and jejunum of small intestine. In the kidney, expression occurred in the proximal tubule and the loop of Henle, being restricted to tubular epithelial cells in both the cortex and the medulla. In the colon, predominantly expressed in the distal half of the large bowel and in the most terminal ileum. Localized selectively in the luminal surface of crypts in the large intestine and to the brush border in the middle parts of crypts in the cecum. In the brain, expression was seen throughout, exclusively in neurons, including the cortex, hippocampus, cerebellum and pituitary gland (at protein level). Expression is reduced in oligodendrogliomas.

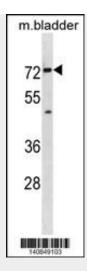
Mouse Slc5a8 Antibody (C-term) - Protocols

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

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

Mouse Slc5a8 Antibody (C-term) - Images





Mouse Slc5a8 Antibody (C-term) (Cat. #AP19791b) western blot analysis in mouse bladder tissue lysates (35ug/lane). This demonstrates the Mouse Slc5a8 antibody detected the Mouse Slc5a8 protein (arrow).

Mouse 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, 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. 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. 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.

Mouse Slc5a8 Antibody (C-term) - References

Borthakur, A., et al. Am. J. Physiol. Gastrointest. Liver Physiol. 299 (4), G928-G934 (2010): Singh, N., et al. J. Biol. Chem. 285(36):27601-27608(2010)

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