

SLC5A12 Antibody (C-term)

Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)
 Catalog # AP10330b-400 □

Specification

SLC5A12 Antibody (C-term) - Product info

Application	IHC-P, FC, WB
Primary Accession	Q1EHB4
Other Accession	NP_848593.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Clone Names	RB27881
Calculated MW	67647

SLC5A12 Antibody (C-term) - Additional info

Gene ID 159963

Other Names

Sodium-coupled monocarboxylate transporter 2, Electroneutral sodium monocarboxylate cotransporter, Low-affinity sodium-lactate cotransporter, Solute carrier family 5 member 12, SLC5A12, SMCT2

Target/Specificity

This SLC5A12 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 576-605 amino acids from the C-terminal region of human SLC5A12.

Dilution

WB~~1:2000
 IHC-P~~1:50~100
 FC~~1:10~50

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

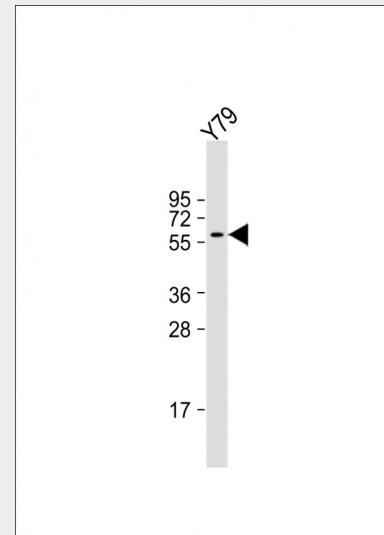
SLC5A12 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SLC5A12 Antibody (C-term) - Protein Information

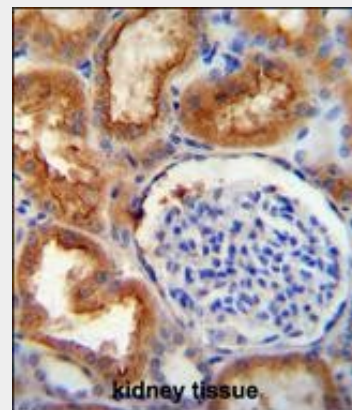
Name SLC5A12

Synonyms SMCT2

Function



Anti-SLC5A12 Antibody (C-term) at 1:2000 dilution + Y79 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 : 68 kDa Blocking/Dilution buffer: 5% NFD/MTBST.



SLC5A12 antibody (C-term) (Cat. #AP10330b) immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the SLC5A12 antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Acts as an electroneutral and low-affinity sodium (Na^+)-dependent sodium-coupled solute transporter. Catalyzes the transport across the plasma membrane of many monocarboxylates such as lactate, pyruvate, nicotinate, propionate, butyrate and beta-D- hydroxybutyrate. May be responsible for the first step of reabsorption of monocarboxylates from the lumen of the proximal tubule of the kidney and the small intestine. May play also a role in monocarboxylates transport in the retina (By similarity). Mediates electroneutral uptake of lactate, with a stoichiometry of 2 Na^+ for each lactate (By similarity).

Cellular Location

Apical cell membrane; Multi-pass membrane protein.
Note=Detected at the brush border membrane of the kidney.
Colocalizes with viementin in Mueller cells (By similarity).

SLC5A12 Antibody (C-term) - Protocols

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

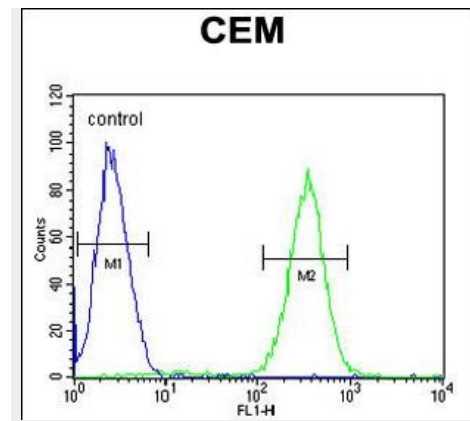
- [□ Western Blot](#)
- [□ Blocking Peptides](#)
- [□ Dot Blot](#)
- [□ Immunohistochemistry](#)
- [□ Immunofluorescence](#)
- [□ Immunoprecipitation](#)
- [□ Flow Cytometry](#)
- [□ Cell Culture](#)

SLC5A12 Antibody (C-term) - Background

Normal blood lactate is maintained at about 1.5 mM, and little filtered lactate is excreted in urine. Reabsorption of lactate is mediated by the low-affinity Na^+ -coupled lactate transporter SLC5A12 in the initial part of the proximal tubule and by the high-affinity Na^+ -coupled lactate transporter SLC5A8 (MIM 608044) in the distal proximal tubule (Gopal et al., 2007 [PubMed 17692818]).

SLC5A12 Antibody (C-term) - References

Gopal, E., et al. Biochim. Biophys. Acta 1768(11):2690-2697(2007)



SLC5A12 Antibody (C-term) (Cat. #AP10330b) flow cytometric analysis of CEM cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.