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SLC5A12 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10330b

Specification

SLC5A12 Antibody (C-term) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	Q1EHB4
Other Accession	NP_848593.2
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**576-605**

SLC5A12 Antibody (C-term) - Additional Information

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 (HGNC:28750)

Synonyms SMCT2

Function Acts as an electroneutral and low-affinity sodium (Na(+))- dependent sodium-coupled solute transporter (PubMed:17692818). Catalyzes the transport across the plasma membrane of many monocarboxylates such as lactate, pyruvate, nicotinate, propionate, butyrate and beta-D-hydroxybutyrate (By similarity). 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).

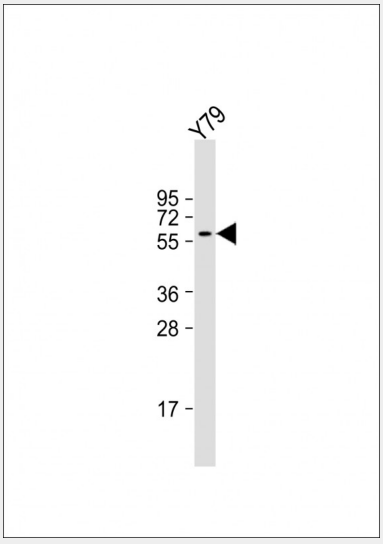
Cellular Location
Apical cell membrane; Multi-pass membrane protein. Note=Detected at the brush border membrane of the kidney. Colocalizes with viementin in Mueller cells {ECO:0000250|UniProtKB:Q49B93}

SLC5A12 Antibody (C-term) - Protocols

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

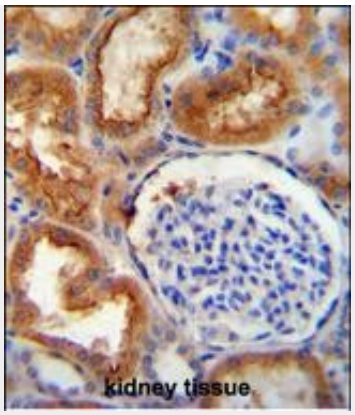
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SLC5A12 Antibody (C-term) - Images

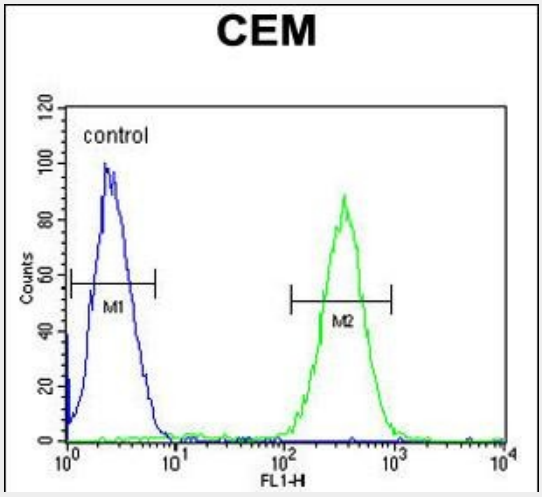


Anti-SLC5A12 Antibody (C-term) at 1:2000 dilution + Y79 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 68 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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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.



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.

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)