

Rabbit anti-Human SLC5A12 Polyclonal Antibody | anti-SLC5A12 antibody

SLC5A12 Antibody (C-term)

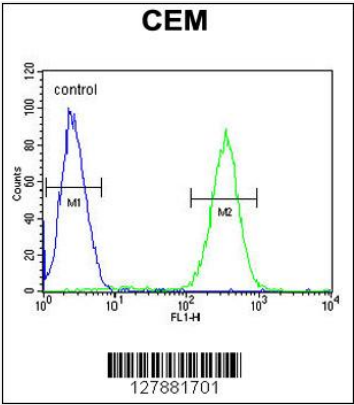
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA28799	Rabbit	Human	Western Blot, Immunohistochemistry, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

SLC5A12; Polyclonal Antibody; SLC5A12 Antibody (C-term); Sodium-coupled monocarboxylate transporter 2; Electroneutral sodium monocarboxylate cotransporter; Low-affinity sodium-lactate cotransporter; Solute carrier family 5 member 12; SMCT2; anti-SLC5A12 antibody

PRODUCT SPECIFICATIONS

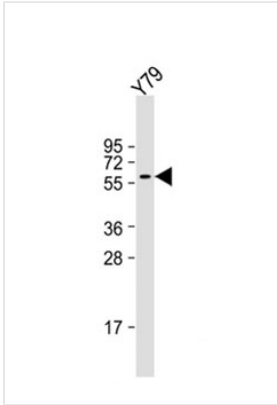
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This SLC5A12 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 576-605 amino acids from the C-terminal region of human SLC5A12.
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Sequence Positions	576-605
Applicable Applications for anti-SLC5A12 antibody	WB (Western Blot), IHC (Immunohistochemistry), FCM/FACS (Flow Cytometry), ELISA
Application Notes	WB~~1:2000; IHC-P~~1:50~100; FC~~1:10~50
Function	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).
Preparation and 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.



FCM (Flow Cytometry)
SLC5A12 Antibody (C-term) 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.



IHC (Immunohistochemistry)
SLC5A12 antibody (C-term) 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.



WB (Western Blot)
Anti-SLC5A12 Antibody (C-term) at 1:2000 dilution + Y79 whole cell lysate. Lysates/proteins at 20 ug 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.

ADDITIONAL INFORMATION

Related Product Information for anti-SLC5A12 antibody	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 (MIM608044) in the distal proximal tubule (Gopal et al., 2007 [PubMed17692818]).
Product Categories/Family for anti-SLC5A12 antibody	Metabolism; Neuroscience; Signal Transduction
References	Gopal, E., et al. Biochim. Biophys. Acta 1768(11):2690-2697(2007)

NCBI AND UNIPROT INFORMATION

NCBI GI #	157671931
NCBI GeneID	159963
NCBI Accession #	NP_848593.2
NCBI GenBank Nucleotide #	NM_178498.3
UniProt Accession #	Q1EHB4; Q86UC7

NCBI Official Full Name	sodium-coupled monocarboxylate transporter 2
NCBI Official Synonym Full Names	solute carrier family 5 (sodium/monocarboxylate cotransporter), member 12
NCBI Official Symbol	SLC5A12
NCBI Official Synonym Symbols	SMCT2
NCBI Protein Information	sodium-coupled monocarboxylate transporter 2
UniProt Protein Name	Sodium-coupled monocarboxylate transporter 2
UniProt Gene Name	SLC5A12
UniProt Synonym Gene Names	SMCT2
UniProt Entry Name	SC5AC_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/slc5a12-antibody-western-blot-immunohistochemistry-flow-cytometry-elisa/28799>