

SLC36A1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP12170A

Product Information

Application	WB, IHC-P, IF, FC, E
Primary Accession	Q7Z2H8
Other Accession	Q924A5 , Q8K4D3 , NP_510968.2
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32200
Calculated MW	53076
Antigen Region	1-30

Additional Information

Gene ID	206358
Other Names	Proton-coupled amino acid transporter 1, Proton/amino acid transporter 1, hPAT1, Solute carrier family 36 member 1, SLC36A1, PAT1
Target/Specificity	This SLC36A1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human SLC36A1.
Dilution	WB~~1:2000 IHC-P~~1:100~500 IF~~1:10~50 FC~~1:10~50 E~~Use at an assay dependent concentration.
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	SLC36A1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SLC36A1 (HGNC:18761)
Function	Electrogenic proton/amino acid symporter with selectivity for small apolar

L-amino acids, their D-enantiomers and selected amino acid derivatives such as 4-aminobutanoate/GABA (PubMed:[12527723](#), PubMed:[12809675](#), PubMed:[19549785](#)). May be involved in the efflux from the lysosomal compartment of neutral amino acids resulting from proteolysis (By similarity). May play a role in specifying sites for exocytosis in neurons (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Lysosome membrane; Multi-pass membrane protein. Note=In neurons, colocalizes with the exocyst complex in the axonal processes {ECO:0000250|UniProtKB:Q924A5}

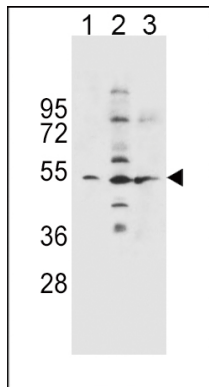
Background

This gene encodes a member of the eukaryote-specific amino acid/auxin permease (AAAP) 1 transporter family. The encoded protein functions as a proton-dependent, small amino acid transporter. This gene is clustered with related family members on chromosome 5q33.1.

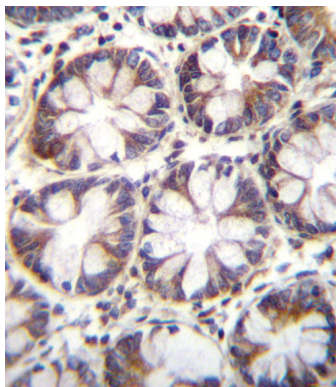
References

Dorn, M., et al. J. Biol. Chem. 284(33):22123-22132(2009)
Dorn, M., et al. FEBS Lett. 583(10):1631-1636(2009)
Metzner, L., et al. Mol. Pharm. 6(3):1006-1011(2009)
Anderson, C.M., et al. J. Physiol. (Lond.) 587 (PT 4), 731-744 (2009) :
Metzner, L., et al. Biochim. Biophys. Acta 1778(4):1042-1050(2008)

Images

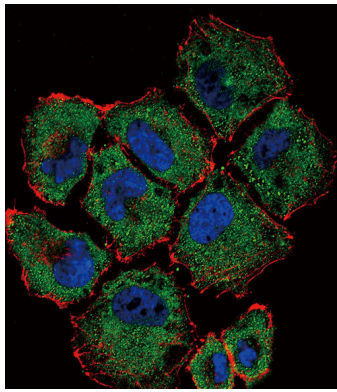


SLC36A1 Antibody (N-term) (Cat. #AP12170a) western blot analysis in NCI-H460(lane 1),K562(lane 2),A549(lane 3) cell line lysates (35ug/lane).This demonstrates the SLC36A1 antibody detected the SLC36A1 protein (arrow).

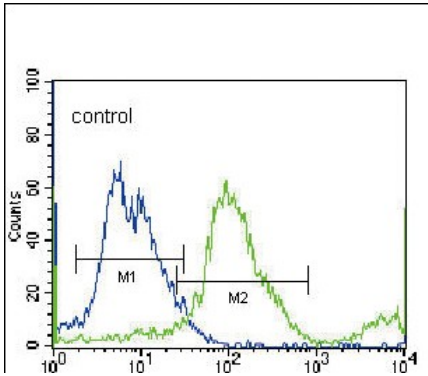


SLC36A1 Antibody (N-term) (Cat. #AP12170a)immunohistochemistry analysis in formalin fixed and paraffin embedded human rectum tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of SLC36A1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Confocal immunofluorescent analysis of SLC36A1 Antibody (N-term)(Cat#AP12170a) with NCI-H460 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Actin filaments have been labeled with Alexa



Fluor 555 phalloidin (red).DAPI was used to stain the cell nuclear (blue).



SLC36A1 Antibody (N-term) (Cat. #AP12170a) flow cytometric analysis of NCI-H460 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.