

# SLC36A1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12170A

### Specification

# SLC36A1 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB, FC, IF, IHC-P,E <u>07Z2H8</u> <u>0924A5</u>, <u>08K4D3</u>, <u>NP\_510968.2</u> Human Mouse, Rat Rabbit Polyclonal Rabbit IgG 53076 1-30

### SLC36A1 Antibody (N-term) - 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~~1:1000 FC~~1:10~50 IF~~1:10~50 IHC-P~~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.

### SLC36A1 Antibody (N-term) - Protein Information



## Name SLC36A1 (<u>HGNC:18761</u>)

**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:<u>12527723</u>, PubMed:<u>12809675</u>, PubMed:<u>19549785</u>). 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**

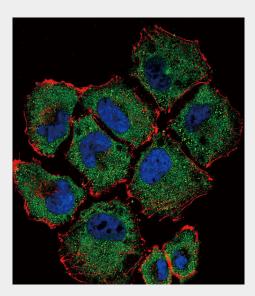
Cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Lysosome membrane; Multi- pass membrane protein. Note=In neurons, colocalizes with the exocyst complex in the axonal processes {ECO:0000250|UniProtKB:Q924A5}

# SLC36A1 Antibody (N-term) - Protocols

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

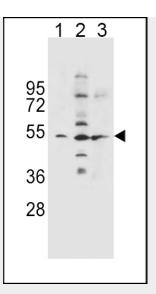
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

SLC36A1 Antibody (N-term) - Images

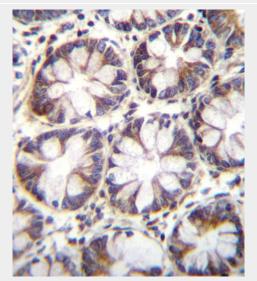


Confocal immunofluorescent analysis of SLC36A1 Antibody (N-term)(Cat#AP12170a) with NCI-H460 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).DAPI was used to stain the cell nuclear (blue).



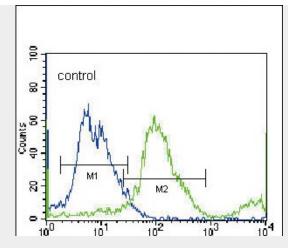


SLC36A1 Antibody (N-term) (Cat. #AP12170a) western blot analysis in NCI-H460(lane 1),K562(lane 2),A549(lane 3) cell line lysates (35ug/lane).This demonstrates the SLC36A1 antibody detected the SLC36A1 protein (arrow).



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.





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.

# SLC36A1 Antibody (N-term) - 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.

# SLC36A1 Antibody (N-term) - 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)