

AAA1 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5508B**Specification**

AAA1 Antibody (C-term) - Product Information

Application	WB, FC,E
Primary Accession	O9NS82
Other Accession	NP_062823.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	495-523

AAA1 Antibody (C-term) - Additional Information**Gene ID** 56301**Other Names**

Asc-type amino acid transporter 1, Asc-1, Solute carrier family 7 member 10, SLC7A10, ASC1

Target/Specificity

This AAA1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 495-523 amino acids from the C-terminal region of human AAA1.

DilutionWB~~1:1000
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

AAA1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

AAA1 Antibody (C-term) - Protein Information**Name** SLC7A10**Synonyms** ASC1

Function Associates with SLC3A2/4F2hc to form a functional heterodimeric complex that translocates small neutral L- and D-amino acids across the plasma membrane. Preferentially mediates exchange transport, but can also operate via facilitated diffusion (By similarity) (PubMed:[10863037](#)). Acts as a major transporter for glycine, L- and D-serine in the central nervous system. At the spinal cord and brainstem regulates glycine metabolism and glycinergic inhibitory neurotransmission by providing for glycine de novo synthesis from L- serine and glycine recycling from astrocytes to glycinergic motor neurons (By similarity). At Schaffer collateral-CA1 synapses mediates D-serine and glycine release that modulates post-synaptic activation of NMDA receptors and excitatory glutamatergic transmission (By similarity). May regulate D-serine release from mesenchymal progenitors located in developing subcutaneous adipose tissue, favoring white adipocyte over thermogenic beige adipocyte lineage commitment (By similarity).

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:P63115}; Multi-pass membrane protein.

Note=Colocalizes with OLIG2 in astrocytic processes. Localizes to the plasma membrane in mature adipocytes and to intracellular structures in preadipocytes {ECO:0000250|UniProtKB:P63115}

Tissue Location

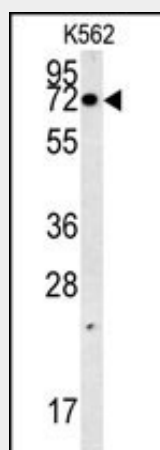
Expressed in brain, heart, kidney, liver, lung, pancreas, placenta, and skeletal muscle.

AAA1 Antibody (C-term) - Protocols

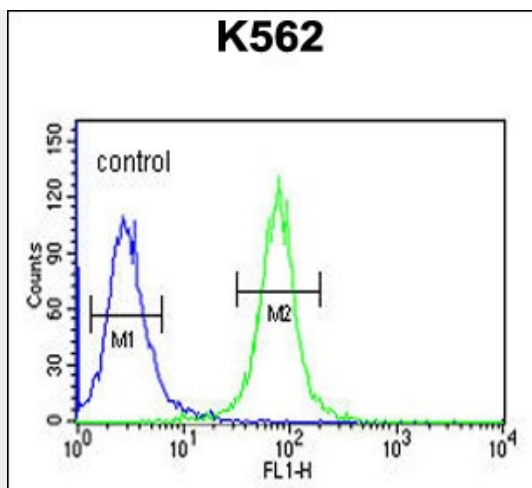
Provided below are standard protocols that you may find useful for product applications.

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

AAA1 Antibody (C-term) - Images



AAA1 Antibody (C-term) (Cat.#AP5508b) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the AAA1 antibody detected the AAA1 protein (arrow).



AAA1 Antibody (C-term) (Cat. #AP5508b) flow cytometric analysis of K562 cells (right histogram) compared to a negative control (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

AAA1 Antibody (C-term) - Background

SLC7A10, in association with 4F2HC (SLC3A2; MIM 158070), mediates high-affinity transport of D-serine and several other neutral amino acids (Nakauchi et al., 2000 [PubMed 10863037]).

AAA1 Antibody (C-term) - References

Imielinski, M., et al. Nat. Genet. 41(12):1335-1340(2009)
Broer, S. Physiol. Rev. 88(1):249-286(2008)
Xu, D., et al. Mol. Cell Proteomics 4(8):1061-1071(2005)