

Anti-SNAT2 Antibody

Catalog # AP53898

Specification

Anti-SNAT2 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB <u>O96OD8</u> Human, Mouse Rabbit Polyclonal 56026

Anti-SNAT2 Antibody - Additional Information

Gene ID 54407

Other Names ATA2; KIAA1382; SAT2; SNAT2; Sodium-coupled neutral amino acid transporter 2; Amino acid transporter A2; Protein 40-9-1; Solute carrier family 38 member 2; System A amino acid transporter 2; System A transporter 1; System N amino acid transporter 2

Target/Specificity Recognizes endogenous levels of SNAT2 protein.

Dilution WB~~1/500 - 1/1000

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

Anti-SNAT2 Antibody - Protein Information

Name SLC38A2 (<u>HGNC:13448</u>)

Function

Symporter that cotransports neutral amino acids and sodium ions from the extracellular to the intracellular side of the cell membrane (PubMed:10930503, PubMed:15774260, PubMed:15922329, PubMed:16621798, PubMed:16621798, PubMed:16621798, PubMed:16621798). The transport is pH-sensitive, Li(+)-intolerant, electrogenic, driven by the Na(+) electrochemical gradient and cotransports of neutral amino acids and sodium ions with a stoichiometry of 1:1. May function in the transport of amino acids at the blood-brain barrier (PubMed:<a



href="http://www.uniprot.org/citations/10930503" target="_blank">10930503, PubMed:15774260). May function in the transport of amino acids in the supply of maternal nutrients to the fetus through the placenta (By similarity). Maintains a key metabolic glutamine/glutamate balance underpinning retrograde signaling by dendritic release of the neurotransmitter glutamate (By similarity). Transports L-proline in differentiating osteoblasts for the efficient synthesis of proline-enriched proteins and provides proline essential for osteoblast differentiation and bone formation during bone development (By similarity).

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:Q9JHE5}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q9JHE5} Note=Insulin promotes recruitment to the plasma membrane from a pool localized in the trans-Golgi network or endosomes. Enriched in the somatodendritic compartment of neurons, it is also detected at the axonal shaft but excluded from the nerve terminal {ECO:0000250|UniProtKB:Q9JHE5}

Tissue Location

Ubiquitously expressed (PubMed:10930503). Expressed in neocortex (PubMed:16616430). Widely expressed in the central nervous system with higher concentrations in caudal regions. Expressed by glutamatergic and GABAergic neurons together with astrocytes and other non-neuronal cells in the cerebral cortex (at protein level) (PubMed:15774260).

Anti-SNAT2 Antibody - Protocols

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

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

Anti-SNAT2 Antibody - Images



Western blot analysis of SNAT2 expression in AML12 (A), HepG2 (B), U87MG (C) whole cell lysates.

Anti-SNAT2 Antibody - Background



Rabbit polyclonal antibody to SNAT2