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sialin / SLC17A5 (aa85-99) Antibody (internal region)

Peptide-affinity purified goat antibody
Catalog # AF3945a

Specification

sialin / SLC17A5 (aa85-99) Antibody (internal region) - Product Information

Application	**WB, E**
Primary Accession	Q9NRA2
Other Accession	NP_036566.1, 26503
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5 mg/ml**
Isotype	**IgG**
Calculated MW	**54640**

sialin / SLC17A5 (aa85-99) Antibody (internal region) - Additional Information

Gene ID 26503

Other Names
Sialin, H(+)/nitrate cotransporter, H(+)/sialic acid cotransporter, AST, Membrane glycoprotein HP59, Solute carrier family 17 member 5, Vesicular H(+)/Aspartate-glutamate cotransporter, SLC17A5

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
sialin / SLC17A5 (aa85-99) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

sialin / SLC17A5 (aa85-99) Antibody (internal region) - Protein Information

Name SLC17A5

Function
Multifunctional anion transporter that operates via two distinct transport mechanisms, namely proton-coupled anion cotransport and membrane potential-dependent anion transport (PubMed:<a

href="http://www.uniprot.org/citations/15510212" target="_blank">15510212, PubMed:21781115, PubMed:22778404, PubMed:23889254). Electroneutral proton-coupled acidic monosaccharide symporter, with a sugar to proton stoichiometry of 1:1. Exports glucuronic acid and free sialic acid derived from sialoglycoconjugate degradation out of lysosomes, driven by outwardly directed lysosomal pH gradient. May regulate lysosome function and metabolism of sialylated conjugates that impact oligodendrocyte lineage differentiation and myelinogenesis in the central nervous system (By similarity) (PubMed:15510212, PubMed:21781115, PubMed:22778404, PubMed:23889254). Electrogenic proton-coupled nitrate symporter that transports nitrate ions across the basolateral membrane of salivary gland acinar cells, with nitrate to proton stoichiometry of 2:1. May contribute to nitrate clearance from serum by salivary glands, where it is further concentrated and secreted in the saliva (PubMed:22778404). Uses membrane potential to drive the uptake of acidic amino acids and peptides into synaptic vesicles. Responsible for synaptic vesicular storage of L-aspartate and L-glutamate in pinealocytes as well as vesicular uptake of N-acetyl-L- aspartyl-L-glutamate neuropeptide, relevant to aspartegic-associated glutamatergic neurotransmission and activation of metabotropic receptors that inhibit subsequent transmitter release (By similarity) (PubMed:21781115, PubMed:22778404, PubMed:23889254).

Cellular Location
Basolateral cell membrane; Multi-pass membrane protein. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane; Multi-pass membrane protein. Lysosome membrane; Multi-pass membrane protein

Tissue Location
In the adult, detected in placenta, kidney and pancreas. Abundant in the endothelial cells of tumors from ovary, colon, breast and lung, but is not detected in endothelial cells from the corresponding normal tissues (PubMed:10581036, PubMed:11751519) Highly expressed in salivary glands and liver, with lower levels of expression in brain, spleen kidney, muscle and pancreas. Expressed in acinar cells of salivary glands (at protein level) (PubMed:22778404)

sialin / SLC17A5 (aa85-99) Antibody (internal region) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

sialin / SLC17A5 (aa85-99) Antibody (internal region) - Images

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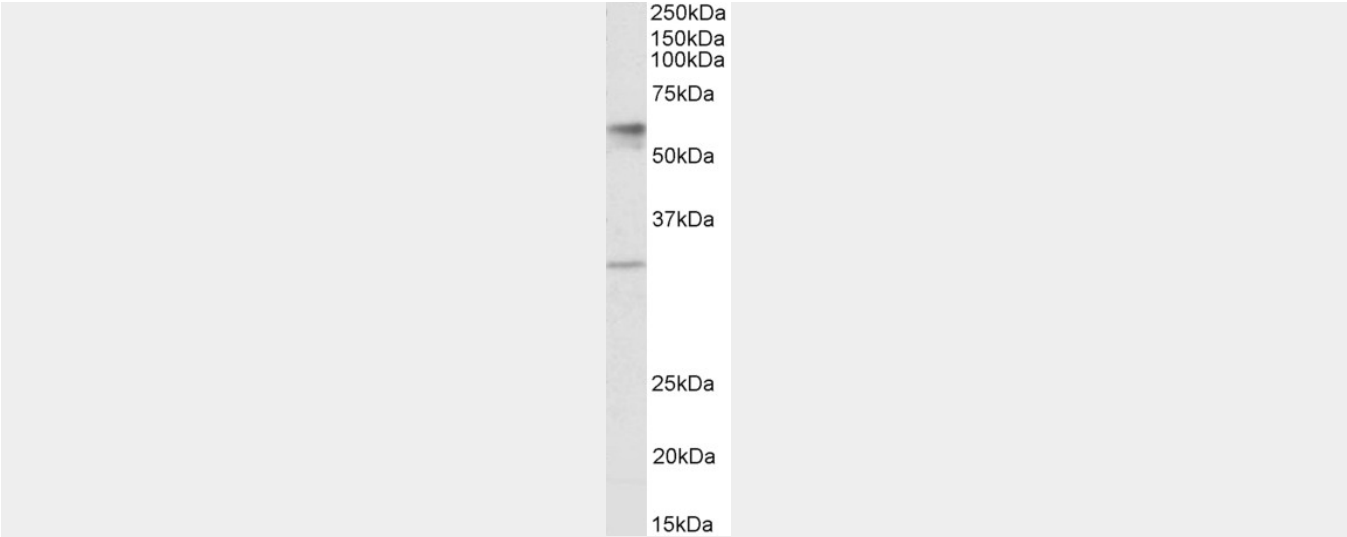

AF3945a (1 µg/ml) staining of Human Placenta lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

sialin / SLC17A5 (aa85-99) Antibody (internal region) - References

Functional characterization of vesicular excitatory amino acid transport by human sialin. Miyaji T, Omote H, Moriyama Y. J Neurochem. 2011 Oct;119(1):1-5. PMID: 21781115