

Sialidase 3 Rabbit pAb

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Catalog # AP56711

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9UQ49
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	48252
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Sialidase 3
Epitope Specificity	361-428/428
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell Membrane
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene product belongs to a family of glycohydrolytic enzymes which remove sialic acid residues from glycoproteins and glycolipids. It is localized in the plasma membrane, and its activity is specific for gangliosides. It may play a role in modulating the ganglioside content of the lipid bilayer. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	10825
Other Names	Sialidase-3, 3.2.1.18, Ganglioside sialidase, Membrane sialidase, N-acetyl-alpha-neuraminidase 3, NEU3
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	NEU3 (HGNC:7760)
Function	Exo-alpha-sialidase that catalyzes the hydrolytic cleavage of the terminal

sialic acid (N-acetylneuraminic acid, Neu5Ac) of a glycan moiety in the catabolism of glycolipids, glycoproteins and oligosaccharides. Displays high catalytic efficiency for gangliosides including alpha-(2->3)-sialylated GD1a and GM3 and alpha-(2->8)- sialylated GD3 (PubMed:[10405317](#), PubMed:[10861246](#), PubMed:[11298736](#), PubMed:[12011038](#), PubMed:[15847605](#), PubMed:[20511247](#), PubMed:[28646141](#)). Plays a role in the regulation of transmembrane signaling through the modulation of ganglioside content of the lipid bilayer and by direct interaction with signaling receptors, such as EGFR (PubMed:[17334392](#), PubMed:[25922362](#)). Desialylates EGFR and activates downstream signaling in proliferating cells (PubMed:[25922362](#)). Contributes to clathrin- mediated endocytosis by regulating sorting of endocytosed receptors to early and recycling endosomes (PubMed:[26251452](#)).

Cellular Location

Cell membrane; Peripheral membrane protein. Membrane, caveola. Early endosome membrane; Peripheral membrane protein. Recycling endosome membrane; Peripheral membrane protein. Lysosome membrane; Peripheral membrane protein. Note=Associates with the external leaflet of the plasma membrane (By similarity). S-acylated NEU3 likely spans the lipid bilayer with a portion of C-terminus exposed to the cytosol and the catalytic region facing the extracellular space (PubMed:[28646141](#)).
{ECO:0000250|UniProtKB:Q9JMH7, ECO:0000269|PubMed:[28646141](#)}

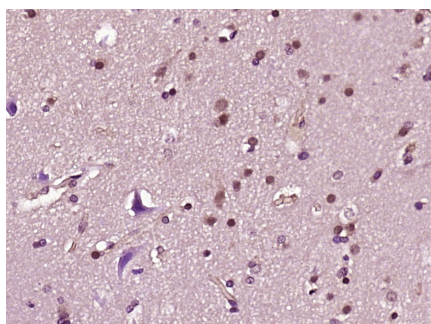
Tissue Location

Highly expressed in skeletal muscle, testis, adrenal gland and thymus, followed by pancreas, liver, heart and thymus. Weakly expressed in kidney, placenta, brain and lung

Background

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Images



Paraformaldehyde-fixed, paraffin embedded (Human brain glioma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Sialidase 3) Polyclonal Antibody, Unconjugated (AP56711) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

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