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NEU1/Neuraminidase Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP59051

Specification

NEU1/Neuraminidase Polyclonal Antibody - Product Information

Application	**WB, IHC-P, IHC-F, IF, ICC, E**
Primary Accession	Q99519
Reactivity	**Rat, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**45 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human NEU1/Neuraminidase**
Epitope Specificity	**151-250/415**
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	**Lysosome membrane. Lysosome lumen. Cell membrane. Cytoplasmic vesicle. Localized not only on the inner side of the lysosomal membrane and in the lysosomal lumen, but also on the plasma membrane and in intracellular vesicles.**
SIMILARITY	**Belongs to the glycosyl hydrolase 33 family. Contains 4 BNR repeats.**
SUBUNIT	**Interacts with cathepsin A (protective protein),beta-galactosidase and N-acetylgalactosamine-6-sulfate sulfatase in a multienzyme complex.**
Post-translational modifications	**N-glycosylated. Phosphorylation of tyrosine within the internalization signal results in inhibition of sialidase internalization and blockage on the plasma membrane.**
DISEASE	**Defects in NEU1 are the cause of sialidosis (SIALIDOSIS) [MIM:256550]. It is a lysosomal storage disease occurring as two types with various manifestations. Type 1 sialidosis (cherry red spot-myoclonus syndrome or normosomatic type) is late-onset and it is characterized by the formation of cherry red macular spots in childhood, progressive debilitating myoclonus, insiduous visual loss and rarely ataxia. The diagnosis can be confirmed by the**

screening of the urine for sialyloligosaccharides. Type 2 sialidosis (also known as dysmorphic type) occurs as several variants of increasing severity with earlier age of onset. It is characterized by the presence of abnormal somatic features including coarse facies and dysostosis multiplex, vertebral deformities, mental retardation, cherry-red spot/myoclonus, sialuria, cytoplasmic vacuolation of peripheral lymphocytes, bone marrow cells and conjunctival epithelial cells.

Important Note

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions
The protein encoded by this gene is a lysosomal enzyme that cleaves terminal sialic acid residues from substrates such as glycoproteins and glycolipids. In the lysosome, this enzyme is part of a heterotrimeric complex together with beta-galactosidase and cathepsin A (the latter is also referred to as 'protective protein'). Mutations in this gene can lead to sialidosis, a lysosomal storage disease that can be type 1 (cherry red spot-myoclonus syndrome or normosomatic type), which is late-onset, or type 2 (the dysmorphic type), which occurs at an earlier age with increased severity. [provided by RefSeq, Jul 2008]

NEU1/Neuraminidase Polyclonal Antibody - Additional Information

Gene ID 4758

Other Names
Sialidase-1, 3.2.1.18, Acetylneuraminyl hydrolase, G9 sialidase, Lysosomal sialidase, N-acetyl-alpha-neuraminidase 1, NEU1, NANH

Target/Specificity
Highly expressed in pancreas, followed by skeletal muscle, kidney, placenta, heart, lung and liver. Weakly expressed in brain.

Dilution
WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Storage
Store at -20 ℃ 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 ℃.

NEU1/Neuraminidase Polyclonal Antibody - Protein Information

Name NEU1

Synonyms NANH

Function
Catalyzes the removal of sialic acid (N-acetylneuraminic acid) moieties from glycoproteins and glycolipids. To be active, it is strictly dependent on its presence in the multienzyme complex. Appears to have a preference for alpha 2-3 and alpha 2-6 sialyl linkage.

Cellular Location
Lysosome membrane; Peripheral membrane protein; Lumenal side. Lysosome lumen. Cell membrane. Cytoplasmic vesicle Lysosome. Note=Localized not only on the inner side of the lysosomal membrane and in the lysosomal lumen, but also on the plasma membrane and in intracellular vesicles

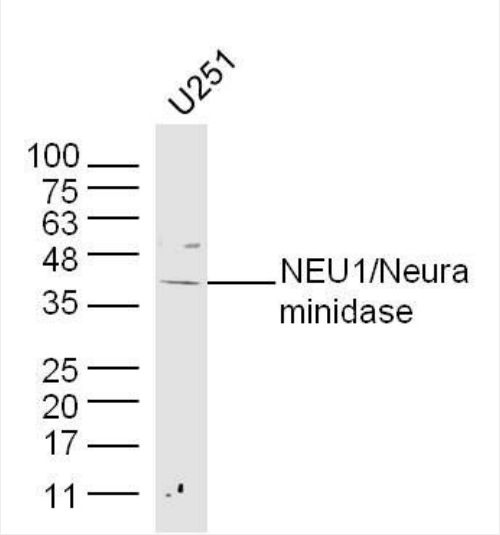
Tissue Location
Highly expressed in pancreas, followed by skeletal muscle, kidney, placenta, heart, lung and liver. Weakly expressed in brain.

NEU1/Neuraminidase Polyclonal Antibody - 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

NEU1/Neuraminidase Polyclonal Antibody - Images



Sample:U251 (human)cell Lysate at 40 ug
Primary: Anti-NEU1/Neuraminidase(bs-8624R)at 1/300 dilution
Secondary: IRDye800CW Goat Anti-RabbitIgG at 1/20000 dilution
Predicted band size: 45kD
Observed band size: 45kD

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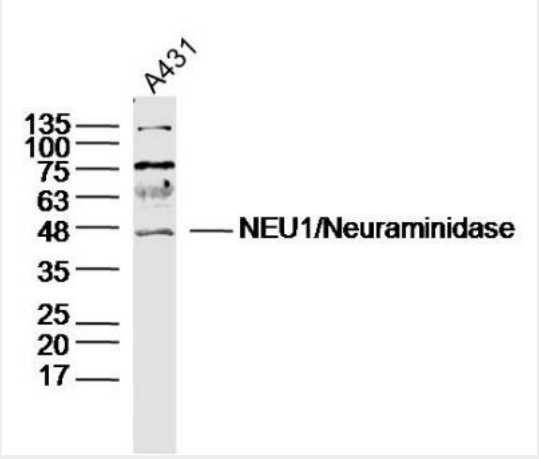

Sample: A431 Cell (Human) Lysate at 40 ug
Primary: Anti-NEU1/Neuraminidase (bs-8624R)at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 45kD
Observed band size: 45kD