



Rabbit Anti-NEU1/Neuraminidase antibody

SL8624R

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| Product Name: | NEU1/Neuraminidase |
| Chinese Name: | 神经氨酸酶1抗体 |
| Alias: | Acetylneuraminyl hydrolase; exo-alpha-sialidase; G9 sialidase; Lysosomal sialidase; N acetyl alpha neuraminidase 1; N-acetyl-alpha-neuraminidase 1; NANH; NEU; NEU1; NEUR1_HUMAN; Neuraminidase 1; Neuraminidase; SIAL1; sialidase 1 (lysosomal sialidase); Sialidase 1; Sialidase, lysosomal; Sialidase-1. |
| Organism Species: | Rabbit |
| Clonality: | Polyclonal |
| React Species: | Human,Rat,Cow, |
| Applications: | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user. |
| Molecular weight: | 45kDa |
| Cellular localization: | cytoplasmicThe cell membrane |
| Form: | Lyophilized or Liquid |
| Concentration: | 1mg/ml |
| immunogen: | KLH conjugated synthetic peptide derived from human NEU1/Neuraminidase:151-250/415 |
| Lsotype: | IgG |
| Purification: | affinity purified by Protein A |
| Storage Buffer: | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol. |
| Storage: | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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. |
| PubMed: | PubMed |
| Product Detail: | 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]

Function:

Catalyzes the removal of sialic acid (N-acetylneuramic 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.

Subunit:

Interacts with cathepsin A (protective protein), beta-galactosidase and N-acetylgalactosamine-6-sulfate sulfatase in a multienzyme complex.

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.

Tissue Specificity:

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

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, insidious 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.

Similarity:

Belongs to the glycosyl hydrolase 33 family.

Contains 4 BNR repeats.

SWISS:
Q99519

Gene ID:
4758

Database links:

[Entrez Gene: 505554](#) Cow

[Entrez Gene: 4758](#) Human

[Entrez Gene: 18010](#) Mouse

[Entrez Gene: 100172668](#) Orangutan

[Entrez Gene: 100124381](#) Pig

[Entrez Gene: 24591](#) Rat

[Omim: 608272](#) Human

[SwissProt: A6BMK7](#) Cow

[SwissProt: Q99519](#) Human

[SwissProt: O35657](#) Mouse

[SwissProt: Q5RAF4](#) Orangutan

[SwissProt: A5PF10](#) Pig

[SwissProt: Q99PW3](#) Rat

[Unigene: 520037](#) Human

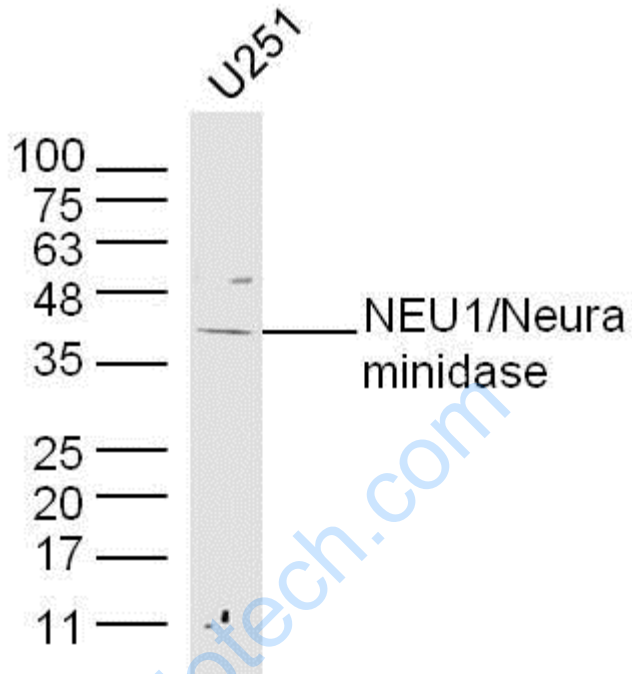
[Unigene: 8856](#) Mouse

[Unigene: 128560](#) Rat

Important Note:

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

Picture:



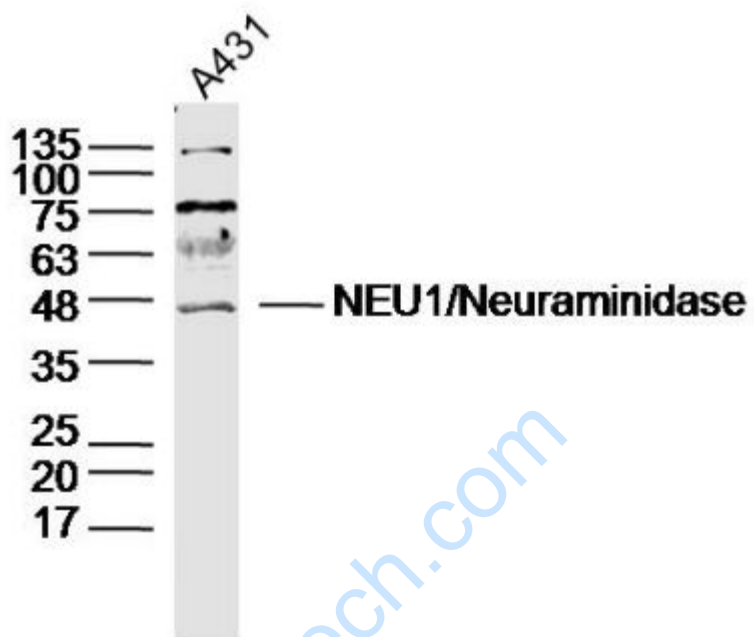
Sample: U251 (human) cell Lysate at 40 ug

Primary: Anti-NEU1/Neuraminidase (SL8624R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 45 kD

Observed band size: 45 kD



Sample: A431 Cell (Human) Lysate at 40 ug

Primary: Anti-NEU1/Neuraminidase (SL8624R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 45kD

Observed band size: 45kD