

**NEU1 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP20027c****Specification**

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**NEU1 Antibody (Center) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O99519</a>
Other Accession	<a href="#">A6BMK7</a> , <a href="#">NP_000425.1</a>
Reactivity	Human
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	45467
Antigen Region	188-214

**NEU1 Antibody (Center) - Additional Information****Gene ID** 4758**Other Names**Sialidase-1, Acetylneuraminyl hydrolase, G9 sialidase, Lysosomal sialidase,  
N-acetyl-alpha-neuraminidase 1, NEU1, NANH**Target/Specificity**

This NEU1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 188-214 amino acids from the Central region of human NEU1.

**Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

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

**Precautions**

NEU1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**NEU1 Antibody (Center) - 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; Luminal 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

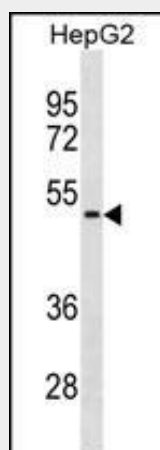
**Tissue Location**

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

**NEU1 Antibody (Center) - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**NEU1 Antibody (Center) - Images**

NEU1 Antibody (Center) (Cat. #AP20027c) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the NEU1 antibody detected the NEU1 protein (arrow).

**NEU1 Antibody (Center) - Background**

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.

#### **NEU1 Antibody (Center) - References**

Caciotti, A., et al. J. Neurol. 256(11):1911-1915(2009)  
Bonten, E.J., et al. J. Biol. Chem. 284(41):28430-28441(2009)  
Barcellos, L.F., et al. PLoS Genet. 5 (10), E1000696 (2009) :  
Wang, J., et al. J. Neurochem. 111(2):547-554(2009)  
Lai, S.C., et al. Eur. J. Neurol. 16(8):912-919(2009)