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NEU2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12189A

Specification

NEU2 Antibody (N-term) - Product Information

Application	**WB, IHC-P-Leica, FC, IF,E**
Primary Accession	Q9Y3R4
Other Accession	NP_005374.2
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**23-50**

NEU2 Antibody (N-term) - Additional Information

Gene ID 4759

Other Names
Sialidase-2, Cytosolic sialidase, N-acetyl-alpha-neuraminidase 2, NEU2

Target/Specificity
This NEU2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 23-50 amino acids from the N-terminal region of human NEU2.

Dilution
WB~~1:2000
IHC-P-Leica~~1:250
FC~~1:10~50
IF~~1:10~50
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
NEU2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

NEU2 Antibody (N-term) - Protein Information

Name NEU2

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 oligosacharides (PubMed:14613940, PubMed:22228546). Recognizes sialyl linkage positions of the glycan moiety as well as the supramolecular organization of the sialoglycoconjugate. Displays preference for alpha- (2->3)-sialylated GD1a and GT1B gangliosides over alpha-(2->8)- sialylated GD1b, in both monomeric forms and micelles. Hydrolyzes monomeric GM1 ganglioside, but has no activity toward the miscellar form (PubMed:14613940). Has lower sialidase activity for glycoproteins such as fetuin and TF/transferrin that carry a mixture of alpha-(2->3) and alpha-(2->6)-sialyl linkages. Cleaves milk oligosaccharide alpha-(2->3)-sialyllactose, but is inactive toward alpha-(2->6)-sialyllactose isomer. Has no activity toward colominic acid, a homomer of alpha- (2->8)-linked Neu5Ac residues (PubMed:14613940).

Cellular Location
Cytoplasm, cytosol.

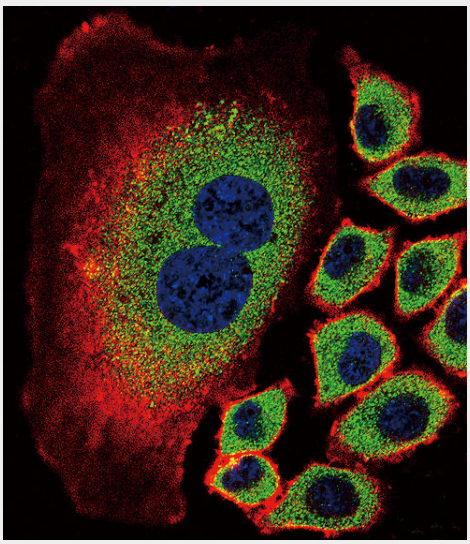
Tissue Location
Expressed in skeletal muscle, fetal liver and embryonic carcinoma cell line NT2-D1.

NEU2 Antibody (N-term) - 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

NEU2 Antibody (N-term) - Images



Confocal immunofluorescent analysis of NEU2 Antibody (N-term)(Cat#AP12189a) with A549 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green).Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red). DAPI was used to stain the cell nuclear (blue).

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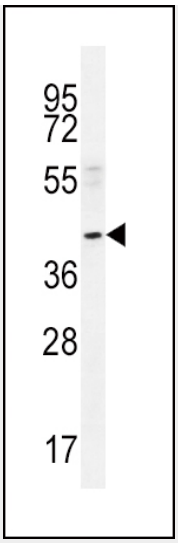
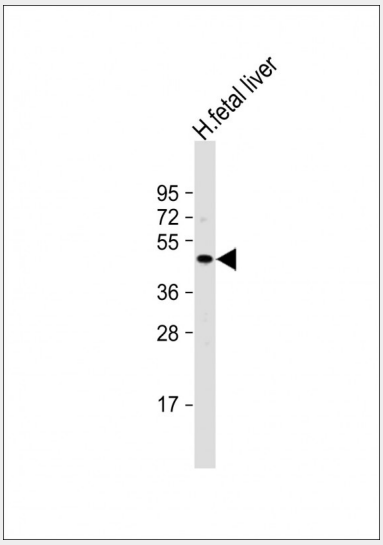


NEU2 Antibody (N-term) (Cat. #AP12189a) western blot analysis in A549 cell line lysates (35ug/lane).This demonstrates the NEU2 antibody detected the NEU2 protein (arrow).



Anti-NEU2 Antibody (N-term) at 1:1000 dilution + human fetal liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 42 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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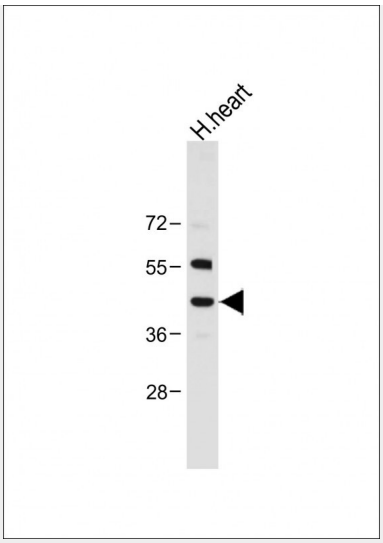
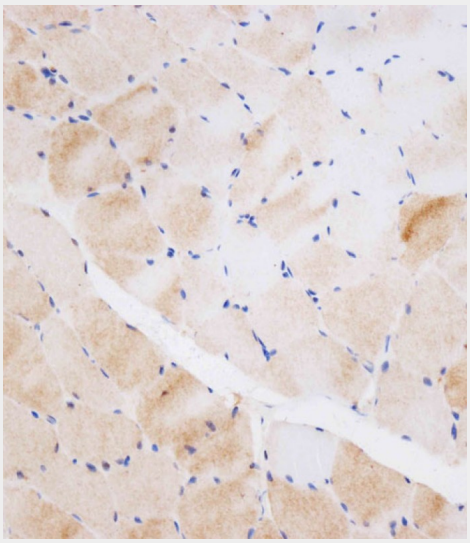


Anti-NEU2 Antibody (N-term) at 1:2000 dilution + Human heart tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 42 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemical analysis of AP12189a on paraffin-embedded human skeletal muscle tissue was performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:250) for 15min at room temperature. Leica Bond Polymer Refine Detection was used as the secondary antibody.

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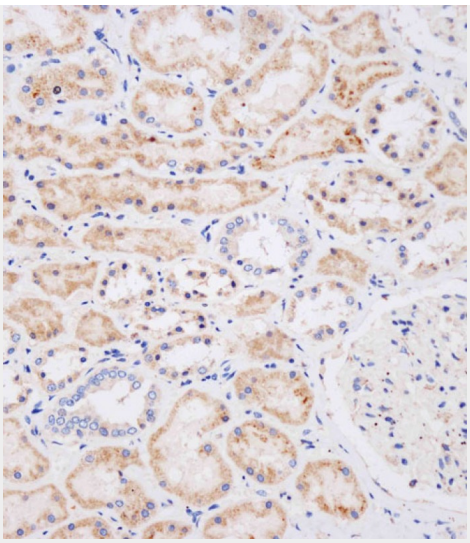
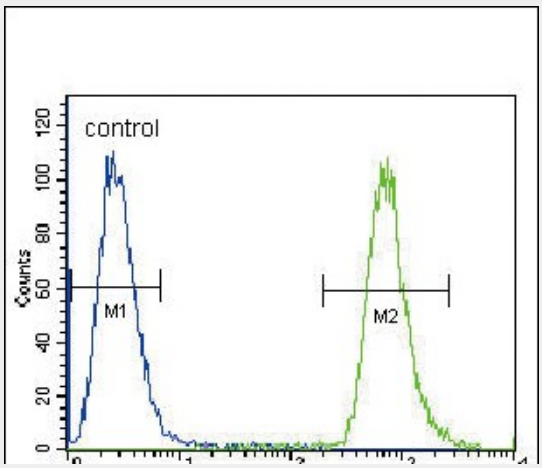


Immunohistochemical analysis of AP12189a on paraffin-embedded human kidney tissue was performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:250) for 15min at room temperature. Leica Bond Polymer Refine Detection was used as the secondary antibody.



NEU2 Antibody (N-term) (Cat. #AP12189a) flow cytometric analysis of A549 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

NEU2 Antibody (N-term) - Background

This gene belongs to a family of glycohydrolytic enzymes which remove sialic acid residues from glycoproteins and glycolipids. Expression studies in COS7 cells confirmed that this gene encodes a functional sialidase. Its cytosolic localization was demonstrated by cell fractionation experiments. [provided by RefSeq].

NEU2 Antibody (N-term) - References

Stoppani, E., et al. Cell Biol. Int. 33(9):1020-1025(2009)
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