

HEXA Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6942a

Specification

HEXA Antibody (N-term) - Product Information

Application WB, IHC-P-Leica, FC,E

Primary Accession P06865

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 142-170

HEXA Antibody (N-term) - Additional Information

Gene ID 3073

Other Names

Beta-hexosaminidase subunit alpha, Beta-N-acetylhexosaminidase subunit alpha, Hexosaminidase subunit A, N-acetyl-beta-glucosaminidase subunit alpha, HEXA

Target/Specificity

This HEXA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 142-170 amino acids from the N-terminal region of human HEXA.

Dilution

WB~~1:2000 IHC-P-Leica~~1:500 FC~~1:10~50

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.

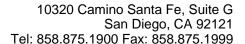
Precautions

HEXA Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

HEXA Antibody (N-term) - Protein Information

Name HEXA (HGNC:4878)

Function Hydrolyzes the non-reducing end N-acetyl-D-hexosamine and/or sulfated





N-acetyl-D-hexosamine of glycoconjugates, such as the oligosaccharide moieties from proteins and neutral glycolipids, or from certain mucopolysaccharides (PubMed:11707436, PubMed:8123671, PubMed:8672428, PubMed:9694901). The isozyme S is as active as the isozyme A on the anionic bis-sulfated glycans, the chondroitin-6- sulfate trisaccharide (C6S-3), and the dermatan sulfate pentasaccharide, and the sulfated glycosphingolipid SM2 (PubMed:11707436). The isozyme B does not hydrolyze each of these substrates, however hydrolyzes efficiently neutral oligosaccharide (PubMed:11707436). Only the isozyme A is responsible for the degradation of GM2 gangliosides in the presence of GM2A (PubMed:8123671, PubMed:8672428, PubMed:9694901).

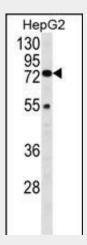
Cellular Location Lysosome.

HEXA Antibody (N-term) - Protocols

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

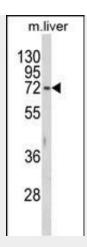
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HEXA Antibody (N-term) - Images

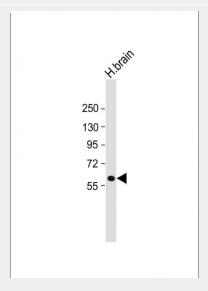


Western blot analysis of HEXA Antibody (N-term) (Cat. #AP6942a) in HepG2 cell line lysates (35ug/lane). HEXA (arrow) was detected using the purified Pab.

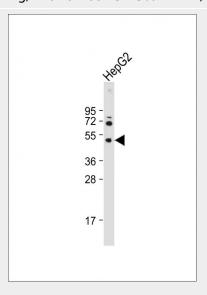




Western blot analysis of HEXA Antibody (N-term) (Cat. #AP6942a) in mouse liver tissue lysates (35ug/lane). HEXA (arrow) was detected using the purified Pab.



Anti-HEXA Antibody (N-term) at 1:1000 dilution + Human brain lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 61 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



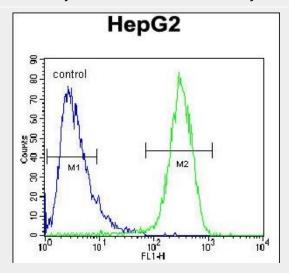
Anti-HEXA Antibody (N-term) at 1:2000 dilution + HepG2 whole cell lysate Lysates/proteins at 20



μg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 61 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemical analysis of paraffin-embedded Human liver tissue using AP6942A performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



HEXA Antibody (N-term) (Cat. #AP6942a) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

HEXA Antibody (N-term) - Background

HEXA is the alpha subunit of the lysosomal enzyme beta-hexosaminidase that, together with the cofactor GM2 activator protein, catalyzes the degradation of the ganglioside GM2, and other molecules containing terminal N-acetyl hexosamines. Beta-hexosaminidase is composed of two subunits, alpha and beta, which are encoded by separate genes. Both beta-hexosaminidase alpha and beta subunits are members of family 20 of glycosyl hydrolases.

HEXA Antibody (N-term) - References

Park, N.J., et.al., Pediatr. Res. (2009)





Pennybacker, M., et.al., J. Biol. Chem. 271 (29), 17377-17382 (1996)