

HEXA Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6942c

Product Information

Application WB, IHC-P, FC, E

Primary Accession P06865 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB20993 **Calculated MW** 60703 **Antigen Region** 315-343

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/SpecificityThis HEXA antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 315-343 amino acids from the Central

region of human HEXA.

Dilution WB~~1:1000 IHC-P~~1:100~500 FC~~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 HEXA Antibody (Center) is for research use only and not for use in diagnostic

or therapeutic procedures.

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.

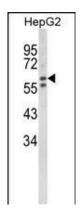
Background

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.

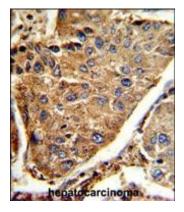
References

Park, N.J., et.al., Pediatr. Res. (2009) Pennybacker, M., et.al., J. Biol. Chem. 271 (29), 17377-17382 (1996)

Images

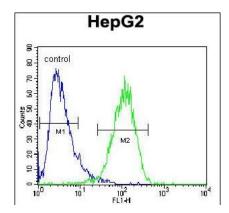


Western blot analysis of HEXA Antibody (Center) (Cat. #AP6942c) in HepG2 cell line lysates (35ug/lane). HEXA (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with HEXA Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

HEXA Antibody (Center) (Cat. #AP6942c) 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.