

## **HEXA Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6942c

## **Specification**

# HEXA Antibody (Center) - Product Information

Application Primary Accession Reactivity	FC, IHC-P, WB,E <u>P06865</u> Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	60703
Antigen Region	315-343

# HEXA Antibody (Center) - 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 315-343 amino acids from the Central region of human HEXA.

**Dilution** FC~~1:10~50 IHC-P~~1:50~100 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

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

## HEXA Antibody (Center) - Protein Information

Name HEXA (<u>HGNC:4878</u>)



**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:<u>11707436</u>, PubMed:<u>8123671</u>, PubMed:<u>8672428</u>, PubMed:<u>9694901</u>). 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:<u>11707436</u>). The isozyme B does not hydrolyze each of these substrates, however hydrolyzes efficiently neutral oligosaccharide (PubMed:<u>11707436</u>). Only the isozyme A is responsible for the degradation of GM2 gangliosides in the presence of GM2A (PubMed:<u>8123671</u>, PubMed:<u>8672428</u>, PubMed:<u>9694901</u>).

Cellular Location Lysosome.

# **HEXA Antibody (Center) - Protocols**

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

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

# HEXA Antibody (Center) - 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.

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

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