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HEXA Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6942a

Product Information

Application	IHC-P-Leica, FC, WB, E
Primary Accession	P06865
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB20977
Calculated MW	60703
Antigen Region	142-170

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	IHC-P-Leica~~1:500 FC~~1:10~50 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 (N-term) 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.

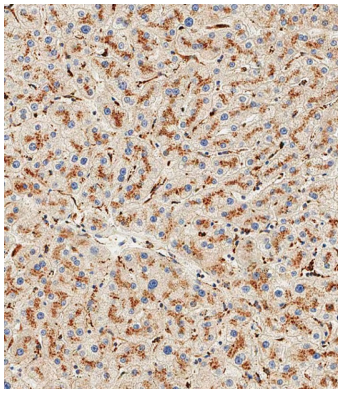
Background

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.

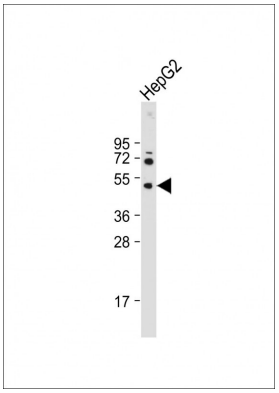
References

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

Images



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.



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.