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Anti-HEXB Picoband Antibody

Catalog # ABO11902

Product Information

Application	WB, IHC-P
Primary Accession	P07686
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Beta-hexosaminidase subunit beta(HEXB) detection. Tested with WB, IHC-P in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	3074
Other Names	Beta-hexosaminidase subunit beta, 3.2.1.52, Beta-N-acetylhexosaminidase subunit beta, Hexosaminidase subunit B, Cervical cancer proto-oncogene 7 protein, HCC-7, N-acetyl-beta-glucosaminidase subunit beta, Beta-hexosaminidase subunit beta chain B, Beta-hexosaminidase subunit beta chain A, HEXB
Calculated MW	63137
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Human, By Heat Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Lysosome.
Source	Eukaryota
Protein Name	Beta-hexosaminidase subunit beta
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human HEXB recombinant protein (Position: K381-M556). Human HEXB shares 75% and 73% amino acid (aa) sequences identity with mouse and rat HEXB, respectively.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins

Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the glycosyl hydrolase 20 family.

Protein Information

Name	HEXB (HGNC:4879)
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 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). During fertilization is responsible, at least in part, for the zona block to polyspermy. Present in the cortical granules of non-activated oocytes, is exocytosed during the cortical reaction in response to oocyte activation and inactivates the sperm galactosyltransferase-binding site, accounting for the block in sperm binding to the zona pellucida (By similarity).
Cellular Location	Lysosome. Cytoplasmic vesicle, secretory vesicle, Cortical granule {ECO:0000250|UniProtKB:P20060}

Background

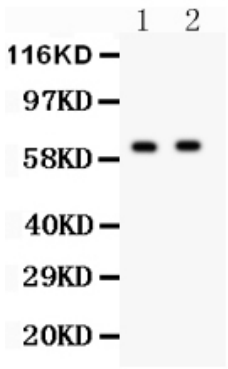
Beta-hexosaminidase subunit beta (HEXB) is an enzyme that in humans is encoded by the HEXB gene. It is mapped to 5q13.3. HEXB is the beta subunit of the lysosomal enzyme beta-hexosaminidase that, together with the cofactor GM2 activator protein, catalyzes the degradation of the ganglioside GM2, and other molecules containing terminal N-acetyl hexosamines. Beta subunit gene mutations lead to Sandhoff disease (GM2-gangliosidosis type II). It has been found that HEXB is a peptidoglycan hydrolase and it is involved in restricting mycobacteria growth even before the onset of adaptive immunity.

Images

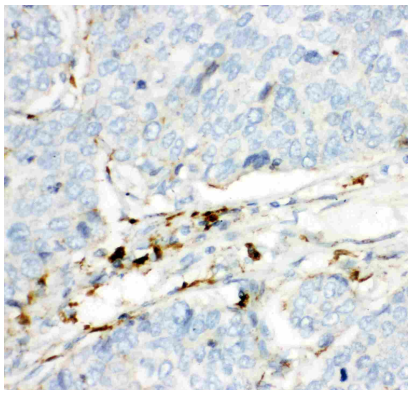


Anti- HEXB antibody, ABO11902, Western blottingAll lanes: Anti HEXB (ABO11902) at 0.5ug/mlWB: Recombinant Human HEXB Protein 0.5ngPredicted bind size: 38KDObserved bind size: 38KD

Anti- HEXB antibody, ABO11902, Western blottingAll lanes: Anti HEXB (ABO11902) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: HEPG2 Whole Cell Lysate at 40ugPredicted bind size: 63KDObserved bind



size: 63KD



Anti- HEXB antibody, ABO11902,IHC(P)IHC(P): Human Lung Cancer Tissue

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