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Anti-HEXB Picoband Antibody

Catalog # ABO11902

Specification

Anti-HEXB Picoband Antibody - 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.

Anti-HEXB Picoband Antibody - 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
63111 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Lysosome.

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.

Anti-HEXB Picoband Antibody - 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}

Anti-HEXB Picoband Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-HEXB Picoband Antibody - Images

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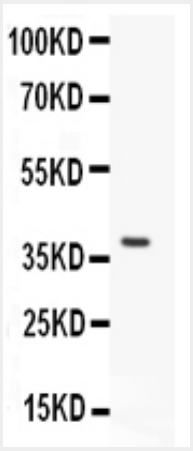
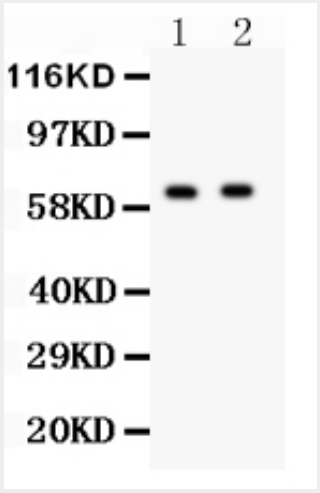
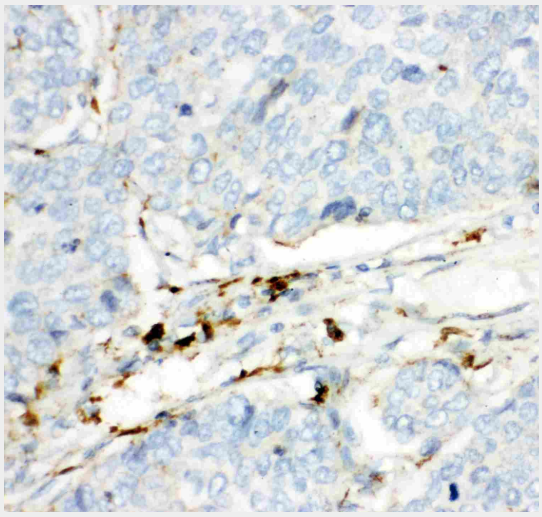


Anti- HEXB antibody, ABO11902, Western blottingAll lanes: Anti HEXB (ABO11902) at 0.5ug/mlWB: Recombinant Human HEXB Protein 0.5ngPredicted bind size: 38KDObserved bind size: 38KD



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



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

Anti-HEXB Picoband Antibody - 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.