Datasheet for ABIN3044173

anti-Hexosaminidase A antibody (Middle Region)

3 Images

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Overview

Quantity:	100 µg
Target:	Hexosaminidase A (HEXA)
Binding Specificity:	AA 191-207, Middle Region
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Hexosaminidase A antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Purpose:	Rabbit IgG polyclonal antibody for Beta-hexosaminidase subunit alpha(HEXA) detection. Tested with WB, IHC-P in Human,Mouse,Rat.
Immunogen:	A synthetic peptide corresponding to a sequence in the middle region of human HEXA(191-207aa DVMAYNKLNVFHWHLVD), different from the related rat and mouse sequences by one amino acid.
Sequence:	DVMAYNKLNV FHWHLVD
Isotype:	IgG
Cross-Reactivity (Details):	Predicted Cross Reactivity: mouse No cross reactivity with other proteins. Predicted Cross Reactivity: Species predicted to be fit for the product based on sequence similarities.

Product Details

Characteristics:	Rabbit IgG polyclonal antibody for Beta-hexosaminidase subunit alpha(HEXA) detection. Tested with WB, IHC-P in Human,Mouse,Rat. Gene Name: hexosaminidase A(alpha polypeptide) Protein Name: Beta-hexosaminidase subunit alpha
Purification:	Immunogen affinity purified.

Target Details

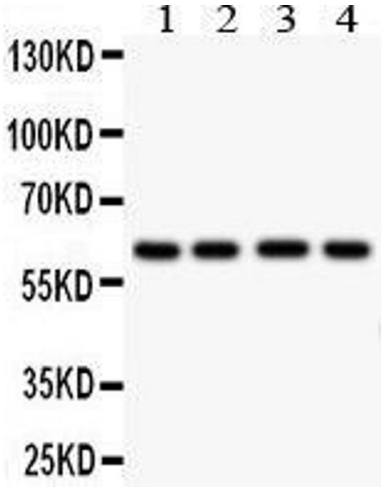
Target:	Hexosaminidase A (HEXA)
Alternative Name:	HEXA (HEXA Products)
Background:	HEXA(hexosaminidase A(alpha polypeptide)) is an enzyme that in humans is encoded by the HEXA gene. Hexosaminidase A and the cofactor GM2 activator protein catalyze the degradation of the GM2 gangliosides and other molecules containing terminal N-acetyl hexosamines The HEXA gene encodes the alpha subunit of hexosaminidase A, a lysosomal enzyme involved in the breakdown of gangliosides. The HEXA gene is mapped on 15q23. Even though the alpha and beta subunits of hexosaminidase A can both cleave GalNAc residues, only the alpha subunit is able to hydrolyze GM2 gangliosides. The alpha subunit contains a key residue, Arg-424, which is essential for binding the N-acetyl-neuramanic residue of GM2 gangliosides. Chimeric constructs were expressed in HeLa cells and selected constructs were produced in the baculovirus expression system to determine their ability to degrade GM2 ganglioside in the presence of GM2 activator protein. Their results allowed them to define 2 noncontiguous sequences in the alpha subunit(amino acids 1-191 and 403-529) which, when substituted into analogous positions in the beta subunit, conferred activity against the sulfated substrate. Synonyms: Beta hexosaminidase alpha chain precursor antibody|Beta hexosaminidase subunit alpha antibody|Beta N acetylhexosaminidase antibody|Beta N acetylhexosaminidase subunit alpha antibody|Beta-hexosaminidase subunit alpha antibody|Beta-N-acetylhexosaminidase subunit alpha antibody|Hexa antibody|HEXA_HUMAN antibody|Hexosaminidase A(alpha polypeptide) antibody|Hexosaminidase A alpha polypeptide antibody|Hexosaminidase A antibody|Hexosaminidase subunit A antibody|MGC99608 antibody|N acetyl beta glucosaminidase antibody|N acetyl beta glucosaminidase subunit alpha antibody|N-acetyl-beta-glucosaminidase subunit alpha antibody|TSD antibody
UniProt:	P06865
Pathways:	Sensory Perception of Sound, Glycosaminoglycan Metabolic Process

Application Details

Application Notes:	WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human, Rat, Predicted Species: Mouse IHC-P: Concentration: 0.5-1 µg/mL, Tested Species: Human, Rat, Predicted Species: Mouse, Epitope Retrieval by Heat: Boiling the paraffin sections in 10 mM citrate buffer, pH 6.0, for 20 mins is required for the staining of formalin/paraffin sections. Notes: Tested Species: Species with positive results. Predicted Species: Species predicted to be fit for the product based on sequence similarities. Other applications have not been tested. Optimal dilutions should be determined by end users.
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).
Restrictions:	For Research Use only

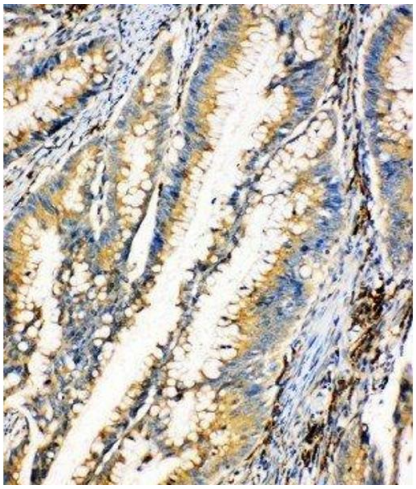
Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Thimerosal, 0.05 mg Sodium azide.
Preservative:	Thimerosal (Merthiolate), Sodium azide
Precaution of Use:	This product contains Sodium azide and Thimerosal (Merthiolate): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	At -20°C for one year. After reconstitution, 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.
Expiry Date:	12 months



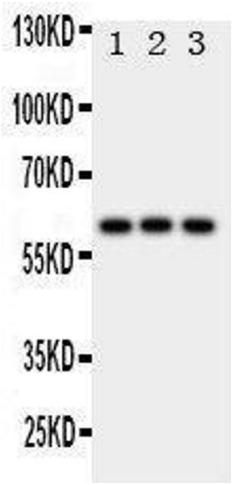
Western Blotting

Image 1. Anti- HEXA antibody, Western blotting All lanes: Anti HEXA () at 0.5ug/ml Lane 1: Human Placenta Tissue Lysate at 50ug Lane 2: HELA Whole Cell Lysate at 40ug Lane 3: HEPG2 Whole Cell Lysate at 40ug Lane 4: U87 Whole Cell Lysate at 40ug Predicted bind size: 61KD Observed bind size: 61KD



Immunohistochemistry

Image 2. Anti-HEXA antibody, IHC(P) IHC(P):Human Intestinal Cancer Tissue



Western Blotting

Image 3.