Datasheet for ABIN7599980

anti-Hexosaminidase A antibody (AA 135-179)

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Overview

Quantity:	100 µg
Target:	Hexosaminidase A (HEXA)
Binding Specificity:	AA 135-179
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Hexosaminidase A antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunocytochemistry (ICC), Immunofluorescence (IF)

Product Details

Purpose:	Anti-HEXA Antibody Picoband®
Immunogen:	E.coli-derived human HEXA recombinant protein (Position: A135-H179).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-HEXA Antibody Picoband® (ABIN7599980). Tested in ELISA, IF, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

Target Details

Target:	Hexosaminidase A (HEXA)
Alternative Name:	HEXA (HEXA Products)
Background:	Synonyms: Early growth response protein 1 Tissue Specificity: Detected in neutrophils (at protein level). 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.
Molecular Weight:	60 kDa
Gene ID:	3073
UniProt:	P06865
Pathways:	Sensory Perception of Sound, Glycosaminoglycan Metabolic Process

Application Details

Application Notes:	Western blot, 0.1-0.25 µg/mL, Human, Mouse, Rat Immunocytochemistry/Immunofluorescence, 5 µg/mL, Human ELISA, 0.1-0.5 µg/mL, -

1. Akli, S., Chomel, J.-C., Lacorte, J.-M., Bachner, L., Poenaru, A., Poenaru, L. Ten novel mutations in the HEXA gene in non-Jewish Tay-Sachs patients. Hum. Molec. Genet. 2: 61-67, 1993. 2. Beutler, E., Kuhl, W., Comings, D. Hexosaminidase isozyme in type O Gm2 gangliosidosis (Sandhoff-Jatzkewitz disease). Am. J. Hum. Genet. 27: 628-638, 1975. 3. Chern, C. J., Beutler, E., Kuhl, W., Gilbert, F., Mellman, W. J., Croce, C. M. Characterization of heteropolymeric hexosaminidase A in human x mouse hybrid cells. Proc. Nat. Acad. Sci. 73: 3637-3640, 1976.

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Adding 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Storage:	4 °C,-20 °C
Storage Comment:	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.