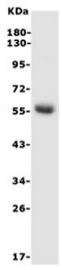
Hexosaminidase A Antibody / HEXA (RQ5817)

Catalog No.	Formulation	Size
RQ5817	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	Q641X3
Applications	Western blot: 0.5-1ug/ml Direct ELISA: 0.1-0.5ug/ml
Limitations	This Hexosaminidase A antibody is available for research use only.



Western blot testing of rat kidney lysate with Hexosaminidase A antibody. Expected molecular weight: ~60 kDa (precursor), ~54 kDa (mature).

Description

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.

Application Notes

Optimal dilution of the Hexosaminidase A antibody should be determined by the researcher.

Immunogen

Recombinant rat protein (amino acids Q28-T528) was used as the immunogen for the Hexosaminidase A antibody.

Storage

After reconstitution, the Hexosaminidase A antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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