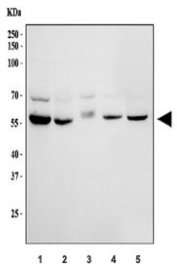
HEXA Antibody / Hexosaminidase A (R30884)

Catalog No.	Formulation	Size
R30884	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P06865
Applications	Western Blot : 0.5-1ug/ml
Limitations	This HEXA antibody is available for research use only.



Western blot testing of human 1) HeLa, 2) 293T, 3) Caco-2, 4) ThP-1 and 5) HepG2 cell lysate with HEXA antibody. Expected molecular weight: ~60 kDa (precursor), ~54 kDa (mature).

Description

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

The stated application concentrations are suggested starting amounts. Titration of the HEXA antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the C-terminus of human HEXA (QAQPLNVGFCEQEFEQT) was used as the immunogen for this HEXA antibody.

Storage

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