

39-2136: Anti-HEXA Polyclonal Antibody

Clonality :	Polyclonal
Application :	WB
Reactivity :	Human
Gene :	HEXA
Gene ID :	3073
Uniprot ID :	P06865
Alternative Name :	Beta-hexosaminidase subunit alpha; 3.2.1.52; Beta-N-acetylhexosaminidase subunit alpha; Hexosaminidase subunit A; N-acetyl-beta-glucosaminidase subunit alpha; HEXA
Isotype :	Rabbit IgG

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.

Product Info

Amount :	100 µg/vial
Purification :	Immunogen affinity purified.
Content :	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg Na ₃ . Reconstitute : Add 0.2ml of distilled water will yield a concentration of 500µg/ml.
Storage condition :	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.

Application Note

Western blot : 0.1-0.5µg/ml; Immunohistochemistry(Paraffin-embedded Section) : 0.5-1µg/ml

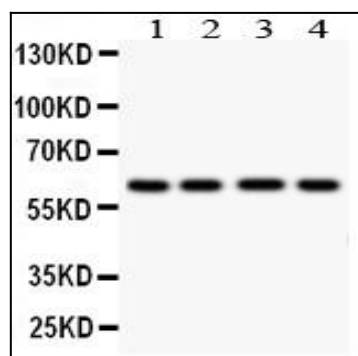


Figure 1: Anti-HEXA antibody, Western blotting: Lanes: Anti HEXA at 0.5 μ g/ml with Lane 1: Human Placenta Tissue Lysate at 50 μ g, Lane 2: HELA Whole Cell Lysate at 40 μ g, Lane 3: HEPG2 Whole Cell Lysate at 40 μ g, Lane 4: U87 Whole Cell Lysate at 40 μ g. Predicted band size: 61 kDa. Observed band size: 61 kDa.