

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Hexosaminidase A/HEXA in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human Hexosaminidase A/HEXA Leu23-Thr529 Accession # P06865
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

HEXA (beta-hexosaminidase subunit alpha; also hexaminidase subunit alpha) is a 50-56 kDa glycoprotein member of the glycosyl hydrolase #20 family of enzymes. It is found in the lysosomes of a variety of cell types including fibroblasts, lacrimal acinar cells, and neurons. β-Hexosaminidase is a multimeric enzyme that cleaves aminoacetylhexosamines from multiple glycosylated molecules. It exists in three noncovalent isozyme forms, among which is an A form that is trimeric and composed of one α- and two β-subunits, a B form that is tetrameric and contains two α- and two β-subunits, and a dimeric S form that contains two α-subunits. The α- and β-subunits are products of related but distinct genes. The β-hexosiminidase A form acts on a wide range of substrates, while the B form activity is biased towards sulfated hexoses. Human HEXA is synthesized as a 529 aa (amino acid) prepro-precursor. It contains a 22 aa signal sequence, a 66 aa prosegment, and a 441 aa mature region that contains a catalytic domain (aa 167-488). The prosegment may undergo additional processing through His90, and this segment (≈ 6 kDa) is known to remain linked to the mature region via a disulfide bond. Notably, circulating HEXA is comprised only of subunit proforms whose MW may run some 10 kDa higher in SDS-PAGE. Over aa 23-529, human HEXA shares 85% and 57% aa sequence identity with mouse HEXA and the human HEXA β-subunit proprecursor, respectively.

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