

Datasheet for ABIN6239906

Hexosaminidase A Protein (HEXA) (AA 319-528) (His tag)[Go to Product page](#)**1** Image

Overview

Quantity:	50 µg
Target:	Hexosaminidase A (HEXA)
Protein Characteristics:	AA 319-528
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Biological Activity:	Active
Purification tag / Conjugate:	This Hexosaminidase A protein is labelled with His tag.
Application:	Activity Assay (AcA), Cell Culture (CC)

Product Details

Characteristics:	Tag location: N-terminal His Tag
Purity:	> 97 %
Biological Activity Comment:	Hexosaminidase A Alpha (HEXa) is a lysosomal enzyme. There are three predominant isoenzymes: hexosaminidase A, B and S. Hexosaminidase A and the cofactor GM2 activator protein catalyze the degradation of the GM2 gangliosides and other molecules containing terminal N-acetyl hexosamines. The enzymes are composed of two alpha and/or beta subunits, which are coded by HEXA and HEXB genes, respectively. Even though the alpha and beta subunits of hexosaminidase A can both cleave GalNAc residues, only the alpha subunit which contains a key residue, Arg-424 is able to hydrolyze GM2 gangliosides. Hexosaminidase A (alpha polypeptide) plays a critical role in the brain and spinal cord (central nervous system). Besides, Hexosaminidase B Beta (HEXB) has been identified as an interactor of HEXA, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse HEXA and

Product Details

recombinant mouse HEXB. Briefly, HEXA were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to HEXB-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-HEXA pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µL stop solution to the wells and read at 450nm immediately. The binding activity of of HEXA and HEXB was shown in Figure 1, and this effect was in a dose dependent manner The binding activity of HEXA with HEXB.

Target Details

Target:	Hexosaminidase A (HEXA)
Alternative Name:	Hexosaminidase A Alpha (HEXa) (HEXA Products)
Background:	Alternative Names: TSD, Hex-A, Tay Sachs Disease, GM2 Gangliosidosis, Beta-Hexosaminidase Subunit Alpha, Beta-N-Acetylhexosaminidase Subunit Alpha, N-Acetyl-Beta-Glucosaminidase Alpha
Molecular Weight:	28kDa
UniProt:	P29416
Pathways:	Sensory Perception of Sound , Glycosaminoglycan Metabolic Process

Application Details

Application Notes:	Isoelectric Point: 6.3
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	20 mM Tris, 150 mM NaCl, pH 8.0, containing 1 mM EDTA, 1 mM DTT, 0.01 % SKL, 5 % Trehalose and Proclin300.
Preservative:	Dithiothreitol (DTT), Other preservative, ProClin
Precaution of Use:	This product contains ProClin and Dithiothreitol (DTT): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.

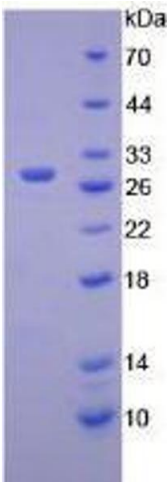


Image 1.