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Product Datasheet

Mouse HEXA protein, His tag, Unconjugated GTX00306-PRO

Article Name	Mouse HEXA protein, His tag, Unconjugated
Biozol Catalog Number	GTX00306-PRO
Supplier Catalog Number	GTX00306-pro
Alternative Catalog Number	GTX00306-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Mouse
Conjugation	Unconjugated
NCBI	15211
UniProt	P29416
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose, ProClin 300.
Expression System	E. coli
Form	Lyophilized powder
Sequence	N-terminal His-Tag, Leu319~Thr528 (NP_034551.2)

Application Notes

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 recombinant mouse HEXB. Briefly, HEXA were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to HEXB-coated microtiter wells and incubated for 2h at 37C. 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 37C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of of HEXA and HEXB was in a dose dependent manner.