

Active Recombinant Mouse Hexa protein, His-tagged

Cat. No. Hexa-179M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Mouse Hexa protein(P29416)(319~528 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Mouse
Source	E.coli
ProteinLength	319-528 aa
Form	Lyophilized from sterile 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Bio-activity	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

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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 50μ stop solution to the wells and read at 450nm immediately. The binding activity of of HEXA and HEXB was shown, and this effect was in a dose dependent manner.

Molecular Mass	28.2kDa
Purity	> 97% as determined by SDS-PAGE.
Storage	Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	Hexa hexosaminidase A [<i>Mus musculus</i>]
Official Symbol	Hexa
Synonyms	HEXA; hexosaminidase A; beta-hexosaminidase subunit alpha; hexosaminidase subunit A; beta-N-acetylhexosaminidase subunit alpha; N-acetyl-beta-glucosaminidase subunit alpha; Hex-1;
Gene ID	15211

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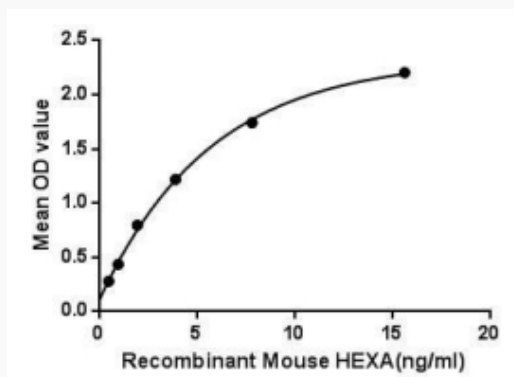
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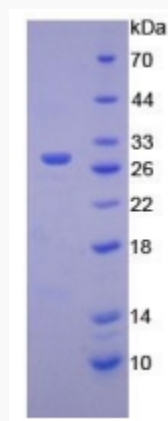
mRNA Refseq NM_010421

Protein Refseq NP_034551

Activity



SDS-PAGE



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