

Recombinant human Hexosaminidase A/HEXA protein

Catalog Number: ATGP1941

PRODUCT INFORMATION

Expression system

E.coli

Domain

89-529aa

UniProt No.

P06865

NCBI Accession No.

NP_000511.1

Alternative Names

beta-hexosaminidase subunit alpha, TSD, hexosaminidase A

PRODUCT SPECIFICATION

Molecular Weight

52.9 kDa (464aa)

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.4M urea, 10% glycerol

Purity

> 85% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE, Denatured

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

HEXA is the alpha subunit of the lysosomal enzyme beta-hexosaminidase that, together with the cofactor GM2 activator protein, catalyzes the degradation of the ganglioside GM2, and other molecules containing terminal N-acetyl hexosamines. Beta-hexosaminidase is composed of two subunits, alpha and beta, which are encoded by separate genes. Both beta-hexosaminidase alpha and beta subunits are members of family 20 of glycosyl hydrolases. Alpha subunit gene mutations lead to Tay-Sachs disease (GM2-gangliosidosis type I). Recombinant human HEXA protein, fused to His-tag at N-terminus, was expressed in E. coli.

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Amino acid Sequence

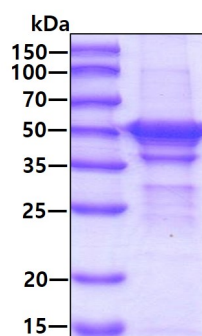
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LRGLETFSQL VWKSAEGTFF INKTEIEDFP RFPHRGLLLD TSRHYLPLSS ILDTLDVMAY NKLNVFHWHL VDDPSFPYES
FTFPELMRKG SYNPVTHIYT AQDVKEVIEY ARLRGIRVLA EFDTPGHTLS WPGGIPGLLT PCYSGSEPSG TFGPVNPSLN
NTYEFMSTFF LEVSSVFPDF YLHLGGDEVD FTCWKSNEI QDFMRKKGFG EDFKQLESFY IQTLLDIVSS YGKGYVWQVE
VFDNKVKIQP DTIIQVWRED IPVNYMKELE LVTKAGFRAL LSAPWYLNRI SYGPDWKDFY VVEPLAFEGT PEQKALVIGG
EACMWGEYVD NTLNLPRLWP RAGAVAERLW SNKLTSDLTF AYERLSHFRC ELLRRGVQAA PLNVGFCEQE FEQT

General References

Nakano T., et al. (1988) J. Neurochem. 51:984-987

DATA

SDS-PAGE



3 μ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.