

Product information

HEXA, 89-529aa

Human, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP1941

Full name: beta-hexosaminidase subunit alpha

NCBI Accession No.: NP_000511

Synonyms: TSD, hexosaminidase A

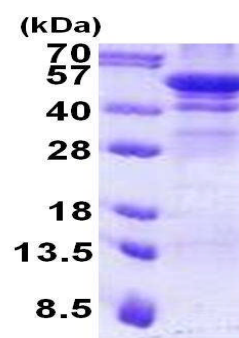
Description: HEXA is the alpha subunit of the lysosomal enzyme beta-hexosaminidase that, together with the cofactor GM2 activator protein, catalyzes the degradation of the ganglioside GM2, and other molecules containing terminal N-acetyl hexosamines. Beta-hexosaminidase is composed of two subunits, alpha 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*.

Form: Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 0.4M UREA, 10% glycerol

Molecular Weight: 52.9 kDa (464aa)

Purity: > 85% by SDS - PAGE

Concentration: 1 mg/ml (determined by Bradford assay)



15% SDS-PAGE (3µg)

Sequences of amino acids:

MGSSHHHHH SSGLVPRGSH MGSLEKNVL VSVVTPGCN QLPTLESVEN YTLTINDQC LLLSETVWGA LRGLTFSQL VWKSAEGTFF
 INKTEIEDFP RFPHRGLLLD TSRHYLPSS ILDTLDVMAY NKLNVFHWHL VDDPSFPYES FTFPELMRKG SYNPTVTHYT AQDVKEVIEY
 ARLRGIRVLA EFDTPGHTLS WGPPIGLLT PCYSGSEPSG TFGPVNPSLN NTYEFMSTFF LEVSSVFPDF YLHLGGDEV DFTCWKSNPEI
 QDFMRKKGFG EDFKQLESFY IQTLDDIVSS YGKGYVWQE VFDNKVKIQP DTIIQVWRED IPVNYMKELE LVTKAGFRAL LSAPWYLNRI
 SYGPDWKDFY VVEPLAFEGT PEQKALVIGG EACMWGEYVD NTNLPRLWP RAGAVAERLW SNKLTSDLTF AYERLSHFRC ELLRRGVQAQ
 PLNVGFCEQE FEQT

General references:

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

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C.
 Avoid repeated freezing and thawing cycles.

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.