



# Recombinant Human Beta-hexosaminidase subunit alpha (HEXA)

<b>Product Code</b>	CSB-MP010315HU
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P06865
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	≥85% (SDS-PAGE)
<b>Sequence</b>	<p>TL EKNVLVSVV TPGCNQLPTL ESVENYTLTI NDDQCLLLSE TVWGALRGLT  TFSQLVWKS A EGTFINKTE IEDFPRFPHR GLLDTSRHY LPLSSILDTL  DVMAYNKLNV FHWHLVDDPS FPYESFTFPE LMRKGSYNPV THIIYAQDVK  EVIEYARLRG IRVLAEFDTP GHTLSWGPPI PGLLTPCYSG SEPSGTFGPV  NPSLNNTYEF MSTFFLEVSS VFPDFYLHLG GDEVDFTCWK SNPEIQDFMR  KKGFGEDFKQ LESFYIQTLL DIVSSYGKGY VVWQEVFDNK VKIQPDTHI  VWREDIPVNY MKELELVTKA GFRALLSAPW YLNRSYGPD WKDFYIVEPL  AFEGTPEQKA LVIGGEACMW GEYVDNTNLV PRLWPRAGAV AERLWSNKLT  SDLTFAYERL SHFRCELLRR GVQAQPLNVG FCEQEFEQT</p>
<b>Source</b>	Mammalian cell
<b>Target Names</b>	HEXA
<b>Protein Names</b>	<p>Recommended name: Beta-hexosaminidase subunit alpha EC= 3.2.1.52  Alternative name(s): Beta-N-acetylhexosaminidase subunit alpha Short name=  Hexosaminidase subunit A N-acetyl-beta-glucosaminidase subunit alpha</p>
<b>Expression Region</b>	89-529
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full Length of Mature Protein
<b>Target Details</b>	<p>This gene encodes 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. Mutations in the alpha or beta subunit genes lead to an accumulation of GM2 ganglioside in neurons and neurodegenerative disorders termed the GM2 gangliosidoses. Alpha subunit gene mutations lead to Tay-Sachs disease (GM2-gangliosidosis type I).</p>
<b>Reconstitution</b>	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a



concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

### Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.