

## Technical Data Sheet

### Human HexA Protein (C-His, CHO Expressed)

**Catalog Number:** 600601, 600602

**Size:** 25 ug, 100 ug

**Target Name:** Hexosaminidase A

**Regulatory Status:** RUO

#### Product Details

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**Application:** ELISA

**Format:** Liquid, Purified

**Expression Host:** CHO

**Species:** Human

**Accession Number:** P06865

**Sources:** Human HexA (Leu23-Thr529) protein with C-terminus His tag is expressed in CHO cells.

**Molecular Weight:** This protein has a predicted molecular weight of 60.2 kDa. Under DTT-reducing conditions, the protein migrates at approximately 65 kDa on SDS-PAGE.

**Affinity Tag:** C-His

**Purity:** >95% based on SDS-PAGE under reducing condition

**Formulation:** 1xPBS buffer, pH7.4, 0.22 µm filtered

**Endotoxin level:** Not tested

**Protein Concentration:** 25µg size is bottled at 0.2mg/mL concentration. 100 µg size is supplied at a lot-specific concentration.

**Storage and Handling:** Briefly centrifuge the vial upon receipt. An unopened vial can be stored at 4°C for up to 2 weeks, or at -20°C or below for up to six months. The protein may be further diluted to 0.1 mg/mL using 0.22 µm-filtered PBS, pH 7.4. For long-term storage, the diluted stock solution should be aliquoted and stored at ≤ -70°C to minimize freeze-thaw cycles. If additional dilution is required, carrier proteins such as FBS or BSA should be added to maintain protein stability.

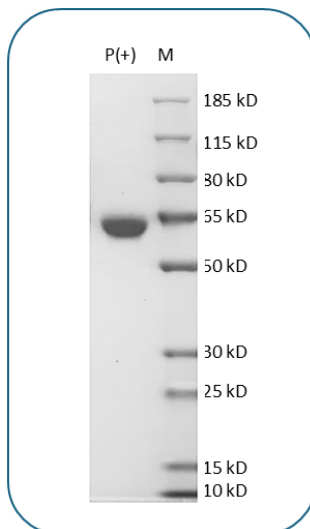
#### Background Information

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Beta-hexosaminidases are lysosomal enzymes that hydrolyze terminal N-acetyl-D-hexosamine residues from GM2 gangliosides and globo-sphingolipids. They exist in three isoforms: Hex A (??), Hex B (??), and Hex S (??), formed by different combinations of ? and ? subunits encoded by the HEXA and HEXB genes. Recombinant HEXA corresponds to Hex S and cleaves non-reducing end N-acetylgalactosamine residues from dermatan sulfate, chondroitin sulfate, and sulfated glycolipids, and is also active against 4-methylumbelliferyl-N-acetyl-?-D-glucosaminide. Mutations in HEXA cause Tay-Sachs disease, a fatal lysosomal storage disorder marked by GM2 ganglioside accumulation in neurons, typically leading to death by age 4.

#### Product Data

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Purified HexA (C-His tag, CHO expressed) final product on SDS-PAGE under reducing (P+) conditions. The purity of HexA appears to be greater than 95%.