

## Technical Data Sheet

### Biotinylated HexA-His/HexB-FLAG Heterodimer Protein

**Catalog Number:** 601003, 601004

**Size:** 25 ug, 100 ug

**Target Name:** Hexosaminidase A, Hexosaminidase B

**Regulatory Status:** RUO

#### Product Details

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**Application:** ELISA

**Format:** Liquid, Biotinylated

**Expression Host:** CHO

**Species:** Human

**Accession Number:** P07686/P06865

**Sources:** Recombinant human HexB (Ala43-Met556) with C-terminus DYKDDDDK tag and human HexA (Leu23-Thr529) with C-terminus His tag are co-expressed in CHO cells. Heterodimer protein is purified sequentially by anti-FLAG tag resin and Nickel resin. The purified heterodimer is then Biotinylated in vitro.

**Molecular Weight:** Human HexA protein has the predicted molecular weight of 60 kD and human HexB protein has the predicted molecular weight of 59.8 kD . Under DTT-reducing conditions, both proteins migrate at approximately 65 kDa on SDS-PAGE.

**Affinity Tag:** C-His and C-DYKDDDDK

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

**Formulation:** PBS with 0.09% NaN<sub>3</sub>, 1% BSA, 10% glycerol (0.2 um 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. 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.

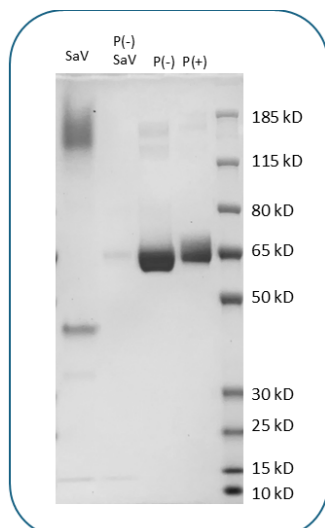
#### Background Information

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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-His/HexB-FLAG Heterodimer corresponds to Hex A isoform.

#### Product Data

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Biotinylated HexA/B heterodimer (HexA-His/HexB-FLAG) final product on SDS-PAGE under non-reducing (P-) and reducing (P+) conditions. The purity of HexA/B heterodimer (HexA-His/HexB-FLAG) is greater than 95%. Based on Gel shift Assay by co-incubation with Streptavidin, biotinylation efficiency is >95% for HexA/B heterodimer