

Technical Data Sheet

Human GM2A Protein (N-His)

Catalog Number: 601501, 601502

Size: 25 ug, 100 ug

Target Name: GM2A, Ganglioside GM2 activator

Regulatory Status: RUO

Product Details

Application: ELISA, BLI

Format: Liquid, Purified

Expression Host: HEK293

Species: Human

Accession Number: P17900

Sources: Recombinant human GM2A mature fragment (Ser32-Ile193) with N-terminus His tag was expressed in 293 Cells

Molecular Weight: This protein has a predicted molecular weight of 19.7 kDa. Under DTT-reducing conditions, the protein migrates at approximately 22 kDa on SDS-PAGE.

Affinity Tag: N-His

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

Formulation: 1xPBS with 300mM NaCl, pH7.4, 0.22 µm filtered

Endotoxin level: Not tested

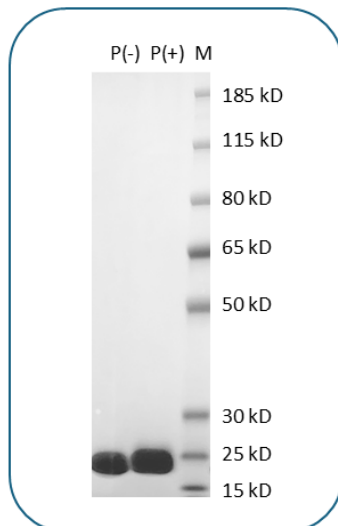
Protein Concentration: 25µg size is bottled at 0.2mg/mL concentration. 100 µg size is supplied at a lot-specific concentration.

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 buffer (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

GM2 ganglioside activator (GM2A) is a lipid transfer protein of the ML domain family that facilitates the degradation of ganglioside GM2 by acting as a substrate-specific cofactor for β-hexosaminidase A. GM2A extracts GM2 from membranes and presents it in soluble form to β-hexosaminidase A for cleavage, enabling conversion to GM3. It can bind several single-chain phospholipids and fatty acids and shows some calcium-independent phospholipase activity. Mutations in GM2A cause GM2-gangliosidosis type AB, a Tay-Sachs disease variant characterized by impaired GM2 degradation and lipid accumulation.

Product Data



Purified Human GM2A (His24-Ile193, with N-terminus His tag, 293 expressed) final product on SDS-PAGE under reducing (P+) conditions. The purity of Human GM2A appears to be greater than 95%.