

Technical Data Sheet

Human GM2A Protein (C-His)

Catalog Number: 601401, 601402
Size: 25 ug, 100 ug
Target Name: GM2A, Ganglioside GM2 activator
Regulatory Status: RUO

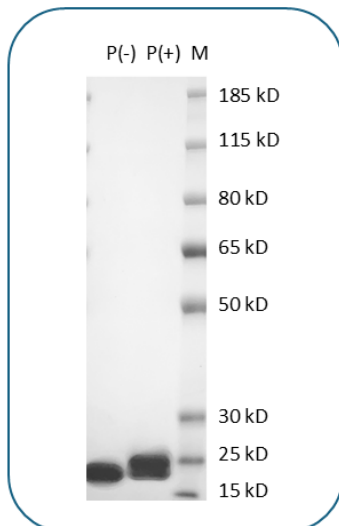
Product Details

Application: ELISA, BLI
Format: Liquid, Purified
Expression Host: HEK293
Species: Human
Accession Number: P17900
Sources: Recombinant human GM2A (His24-Ile193) with C-terminus His tag was expressed in 293 Cells
Molecular Weight: This protein has a predicted molecular weight of 20 kDa. Under DTT-reducing conditions, the protein migrates at approximately 24 kDa on SDS-PAGE.
Affinity Tag: C-His
Purity: >95% based on SDS-PAGE under reducing condition
Formulation: 1xPBS with 300mM NaCl, pH7.4, 0.22 μ m filtered
Endotoxin level: Not tested
Protein Concentration: 25 μ g size is bottled at 0.2mg/mL concentration. 100 μ g 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 μ m-filtered PBS buffer (pH 7.4). For long-term storage, the diluted stock solution should be aliquoted and stored at $\leq -70^{\circ}\text{C}$ 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 C-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%.