

Human GM2A Protein (N-His)

Catalog Number:	601501, 601502
Size:	25 ug, 100 ug
Target Name:	GM2A, Ganglioside GM2 activator
Regulatory Status:	RUO

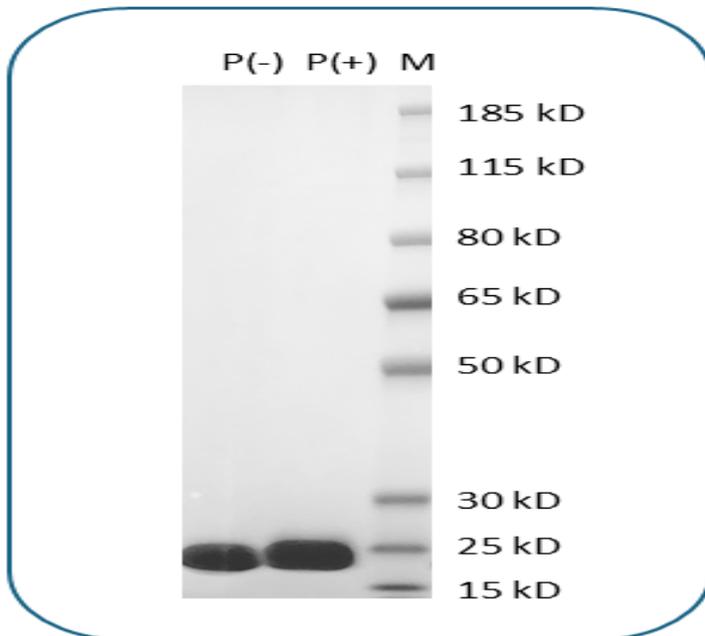
PRODUCT DETAILS

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 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°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%.