



Recombinant Human GM2A (C-6His)

Catalog #	EPT064
Expression Host	Human Cells
DESCRIPTION	Recombinant Human Ganglioside GM2 Activator is produced by our Mammalian expression system and the target gene encoding Ser32-Ile193 is expressed with a 6His tag at the C-terminus.
Accession	AAH09273.1
Synonyms	Ganglioside GM2 activator; Cerebroside sulfate activator protein; GM2-AP; Sphingolipid activator protein 3; SAP-3
Mol Mass	18.6 KDa
AP Mol Mass	19-22 KDa, reducing conditions
Purity	Greater than 95% as determined by reducing SDS-PAGE.
Endotoxin	Less than 0.1 ng/μg (1 EU/μg) as determined by LAL test.
FORMULATION	Lyophilized from a 0.2 μm filtered solution of 20mM Tris-HCl, 150mM NaCl, pH 7.5.





RECONSTITUTION

Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

It is not recommended to reconstitute to a concentration less than 100 μ g/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

SHIPPING

The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

STORAGE

Lyophilized protein should be stored at $< -20^{\circ}\text{C}$, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at $4-7^{\circ}\text{C}$ for 2-7 days.

Aliquots of reconstituted samples are stable at $< -20^{\circ}\text{C}$ for 3 months.

BACKGROUND

Ganglioside GM2 activator (GM2A) is a small glycolipid transport protein which acts as a substrate specific co-factor for the lysosomal enzyme β -hexosaminidase A (HEXB). HEXB together with GM2A, catalyzes the degradation of the ganglioside GM2, and other molecules containing terminal N-acetyl





hexosamines. GM2A accommodate several single chain phospholipids and fatty acids, is a lipid transfer protein that stimulates the enzymatic processing of gangliosides, and also T-cell activation through lipid presentation. It extracts single GM2 molecules from membranes and presents them in soluble form to beta-hexosaminidase A for cleavage of N-acetyl-D-galactosamine and conversion to GM3.

SDS-PAGE

