

Recombinant Human GM2A Protein (Human Cells, His Tag)

Catalog No. PKSH033306

Note: Centrifuge before opening to ensure complete recovery of vial contents.

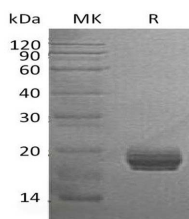
Description

Synonyms	Ganglioside GM2 activator;Cerebroside sulfate activator protein;GM2-AP;Sphingolipid activator protein 3;SAP-3
Species	Human
Expression Host	HEK293 Cells
Sequence	Ser32-Ile193
Accession	AAH09273.1
Calculated Molecular Weight	18.6 kDa
Observed molecular weight	19-22 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, pH 7.5. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

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.