



Recombinant Protein Technical Manual
Recombinant Human GM2A Protein (Human Cells,
His Tag)
RPES1589

Product Data:

Product SKU: RPES1589

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P17900

Protein Information:

Molecular Mass: 18.6 kDa

AP Molecular Mass: 20 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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 TrisHCl, 150mM NaCl, pH7.5.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Ganglioside GM2 activator; Cerebroside sulfate activator protein; GM2-AP; Sphingolipid activator protein 3; SAP-3

Immunogen Information:

Sequence: Ser32-Ile193

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.