

32-3894: GM2A Recombinant Protein

Alternative Name : Ganglioside GM2 activator, Cerebroside sulfate activator protein, GM2-AP, Sphingolipid activator protein 3, SAP-3, GM2A.

Description

Source : Escherichia Coli. GM2A Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain (a.a 33-193) containing 170 amino acids including a 9 a.a N-terminal His tag. The total molecular mass is 18.7kDa (calculated). Ganglioside GM2 activator (GM2A) is a small glycolipid transport protein which functions as a substrate specific co-factor for the lysosomal enzyme beta-hexosaminidase A. GM2A participates in lipid metabolism. GM2A protein is localized in lysosomes. The GM2A protein forms a large binding pocket for a number of single chain phospholipids and fatty acids. GM2A demonstrates calcium-independent phospholipase activity. GM2A stimulates ganglioside GM2 degradation by presenting GM2 to beta-hexosaminidase A. The Beta-hexosaminidase A, along with GM2A, catalyzes the degradation of the ganglioside GM2, and other molecules containing terminal N-acetyl hexosamines. GM2A gene mutations result in GM2-gangliosidosis type AB or the AB variant of Tay-Sachs disease.

Product Info

Amount : 10 µg
Purification : Greater than 95.0% as determined by SDS-PAGE.
Content : GM2A filtered (0.4µm) and lyophilized from 0.5mg/ml in 0.05M Tris buffer and 0.1M NaCl, pH-8.0.
Storage condition : Store lyophilized protein at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time; it does not show any change after two weeks at 4°C.
Amino Acid : MKHHHHHHAS FSWDNCDEGK DPAVIRSLTL EPDPIIVPGN VTL SVMGSTS VPLSSPLKVD
LVLEKEVAGL WIKIPCTDYI GSCTFEHFCD VLDMLIPTGE PCPEPLRTYG LPCHCPFKEG
TYSLPKSEFV VPDLELPSWL TTGNRYIESV LSSSGKRLGC IKIAASLKGI.

Application Note

It is recommended to add deionized water to prepare a working stock solution of approximately 0.5mg/ml and let the lyophilized pellet dissolve completely. GM2A is not sterile! Please filter the product by an appropriate sterile filter before using it in the cell culture.

