Ganglioside GM2 Activator Human E. coli

Product Data Sheet

Type: Recombinant
Source: E. coli
Species: Human
Other names: Cerebroside sulfate activator protein, GM2-AP, Shingolipid activator protein 3, SAP-3, GM2AP

Cat. No.:
RD172309100 (0.1 mg)

Description

Total 170 AA. MW: 18.7 kDa (calculated). UniProtKB acc.no. P17900 (Ser33-Ile193). N-terminal His-tag (9 extra AA). Protein identity confirmed by LC-MS/MS.

Introduction to the Molecule

Ganglioside GM2 activator protein is localized in lysosomes. It takes part in lipid metabolism. Protein forms a large binding pocket for several single chain phospholipids and fatty acids. GM2-AP exhibits calcium-independent phospholipase activity. It stimulates ganglioside GM2 degradation by presenting GM2 to beta-hexosaminidase A.

Research topic

Diabetology - Other Relevant Products, Energy metabolism and body weight regulation, Metabolic syndrome, Neural tissue markers

Amino Acid Sequence

MKHHHHHHAS FSWDNCDEGK DPAVIRSLTL EPDPIIVPGN VTLSVMGSTS VPLSSPLKVD LVLEKEVAGL WIKIPCTDYI GSCTFEHFCD VLDMLIPTGE PCPEPLRTYG LPCHCPFKEG TYSLPKSEFV VPDLELPSWL TTGNYRIESV LSSSGKRLGC IKIAASLKGI

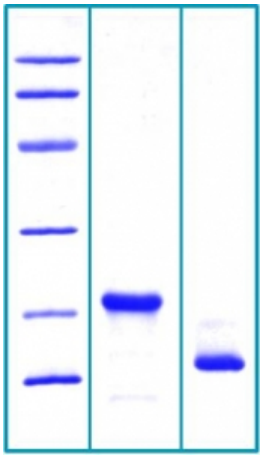
Source

E. coli

Purity

Purity as determined by densitometric image analysis: > 95 %

SDS-PAGE gel



14% SDS-PAGE separation of Hu GM2AP:

1. M.W. marker - 97, 66, 45, 31, 21, 14 kDa

2. reduced and heated sample, 2.5µg/lane

3. non-reduced and non-heated sample, 2.5µg/lane

Endotoxin

< 1.0 EU/ug

Formulation

Filtered (0,4 µm) and lyophilized in 0.5 mg/mL in 0.05 M tris buffer, 0.1 M NaCl, pH 8.0

Reconstitution

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

Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

Storage, Stability/Shelf Life

Store the lyophilized protein at -80°C. Lyophilized protein remains stable until the expiry date when stored at -80°C. Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at -80°C for long term storage. Reconstituted protein can be stored at 4°C for a week.

Quality Control Test

BCA to determine quantity of the protein.
SDS PAGE to determine purity of the protein.
LAL TEST to determine endotoxin level.

Applications

ELISA, Western blotting

Note

This product is intended for research use only.

HEADQUARTERS: BioVendor Laboratorní medicína, a.s.	Karasek 1767/1	621 00 Brno CZECH REPUBLIC	Phone: +420-549-124-185 Fax: +420-549-211-460	E-mail: Web:	info@biovendor.com sales@biovendor.com www.biovendor.com
AUSTRIA: BioVendor GesmbH	Nußdorfer Straße 20/10	1090 Vienna AUSTRIA	Phone: +43-1-89090-25 Fax: +43-1-89090-2515	E-mail:	infoAustria@biovendor.com
GERMANY, SWITZERLAND: BioVendor GmbH	Otto-Hahn-Straße 16	34123 Kassel GERMANY	Phone: +49-6221-433-9100 Fax: +49-6221-433-9111	E-mail:	infoEU@biovendor.com
USA, CANADA AND MEXICO: BioVendor LLC	128 Bingham Rd. Suite 1300	Asheville, NC 28806 USA	Phone: +1-828-575-9250 +1-800-404-7807 Fax: +1-828-575-9251	E-mail:	infoUSA@biovendor.com