

Human GM2A, His Tag, HEK293

Catalog Number LDG016PHM

Package 5 μg / 20 μg / 100 μg / Customized package

For full product information, images and publications, please visit our website.



Specifications

Species of Origin

Human

Affinity Tag

His Tag (C-term)

Purity

>95% as determined by SDS-PAGE analysis.

Endotoxin level

<1 EU per 1 μg of the protein by the LAL method.

Expression system

HEK293

Buffer

Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.

Molecular weight

The protein has a calculated MW of 21.92 kDa. The protein migrates as 24 kDa under reducing condition (SDS-PAGE analysis).

Form

Lyophilized

Background



Background

The human GM2A protein, also known as GM2 ganglioside activator protein, is a small glycoprotein that plays a crucial role in lipid metabolism. It is primarily expressed in lysosomes, where it binds to and facilitates the breakdown of a type of lipid molecule known as GM2 ganglioside. This lipid molecule is typically found in high concentrations in the nervous system and plays a key role in neural signaling. Deficiencies in the GM2A protein have been linked to a rare genetic disorder known as GM2 gangliosidosis, which can lead to the accumulation of GM2 ganglioside in the brain and nervous system. This can result in severe neurological symptoms, including developmental delays, seizures, and loss of motor function. Recent research has also suggested that the GM2A protein may have potential therapeutic applications in the treatment of certain types of cancer. Studies have shown that the protein can help to induce apoptosis (cell death) in cancer cells, and may be able to enhance the effectiveness of certain chemotherapy drugs. Overall, the human GM2A protein plays a critical role in lipid metabolism and has important implications for a range of health conditions, from rare genetic disorders to cancer.

Uniprot ID

#P17900

Synonyms

Cerebroside sulfate activator protein, GM2-AP, Sphingolipid activator protein 3, SAP-3

Sequence Note

Met1-IIe193

Instruction



Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile H_2O to a concentration not less than 200 μ g/mL and incubate the stock solution for at least 20 min to ensure sufficient redissolved.

Stability & Storage

This product is stable after storage at:

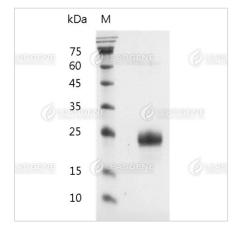
- -20°C for 12 months in lyophilized state from date of receipt.
- -20°C or -80°C for 1 month under sterile conditions after reconstitution.

Avoid repeated freeze/thaw cycles.

Shipping

The product is shipped with polar packs. Upon receipt, store it immediately at -20°C or lower for long term storage.

Image



SDS-PAGE analysis of recombinant human GM2A.

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