

Recombinant human GM3 Synthase/ST3GAL5 protein

Catalog Number: ATGP2418

PRODUCT INFORMATION

Expression system

E.coli

Domain

83-418aa

UniProt No.

Q9UNP4

NCBI Accession No.

NP_003887

Alternative Names

"ST3 beta-galactoside alpha-2,3-sialyltransferase 5", "Lactosylceramide alpha-2,3-sialyltransferase", "CMP-NeuAc:lactosylceramide alpha-2,3-sialyltransferase", GM3 synthase, Ganglioside GM3 synthase, ST3Gal V, Sialyltransferase 9, SIAT9

PRODUCT SPECIFICATION

Molecular Weight

41.0 kDa (359aa)

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol 0.4M urea

Purity

> 85% by SDS-PAGE

Tag

His-Tag

Application

SDS-PAGE, Denatured

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Ganglioside GM3 is known to participate in the induction of cell differentiation, modulation of cell proliferation, maintenance of fibroblast morphology, signal transduction, and integrin-mediated cell adhesion. The protein encoded by this gene is a type II membrane protein which catalyzes the formation of GM3 using lactosylceramide as the substrate. The encoded protein is a member of glycosyltransferase family 29 and may

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be localized to the Golgi apparatus. Mutation in this gene has been associated with Amish infantile epilepsy syndrome. Transcript variants encoding different isoforms have been found for this gene. Recombinant human ST3GAL5 protein, fused to His-tag at N-terminus, was expressed in *E. coli*.

Amino acid Sequence

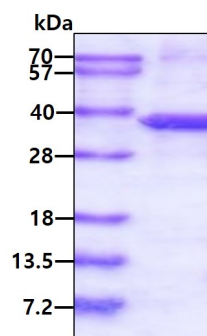
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ALLFEHRYSV DLLPFVQKAP KDSEAESKYD PPFGRKFSV KVQTLLELLP EHDLP EHLKA KTCRRCVVIG SGGILHGLEL
GHTLNQFDVV IRLNSAPVEG YSEHVGNKTT IRMTYPEGAP LSDLEYYSND LFAVLFKSV DFNWLQAMVK KETLPFWVRL
FFWKQVAEKI PLQPKHFRIL NPVIKETAF DILQYSEPPS RFWGRDKNVP TIGVIAVLA THLCDEVSLA GFGYDLNQPR
TPLHYFDSQC MAAMNFQTMH NVTETKFLKLVKEGVVKD LSGGIDREF

General References

Berselli P., Zava S., et al. (2006). *Biochim. Biophys. Acta* 1759:348-358

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.