PRODUCT INFORMATION

Expression system Baculovirus

Domain 30-336aa

UniProt No. Q9BVH7

NCBI Accession No. NP_112227

Alternative Names

Alpha-N-acetylgalactosaminide alpha-2,6-sialyltransferase 5, GD1 alpha synthase, GalNAc alpha-2,6-sialyltransferase V, ST6GalNAc V, ST6GalNAcV, Sialyltransferase 7E, SIAT7-E, SIAT7E

PRODUCT SPECIFICATION

Molecular Weight

36.4 kDa (316aa)

Concentration

0.25mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity > 90% by SDS-PAGE

Endotoxin level < 1 EU per 1ug of protein (determined by LAL method)

Tag His-Tag

Application SDS-PAGE

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

ST6GALNAC5, also known as Alpha-N-acetylgalactosaminide alpha-2,6-sialyltransferase 5, is a member of the glycosyltransferase 29 family. This protein is a sialyltransferase involved in the biosynthesis of ganglioside GD1a from GM1b. It is involved in the pathway protein glycosylation, which is part of Protein modification. It's

expression is restricted to the brain normally. It has been identified as a key player in the metastasis of breast cancer cells to the brain by potentially enabling the cancer cells to cross the blood-brain barrier. Recombinant human ST6GALNAC5, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

<ADL>GGQKERP PQQQQQQQQQQQQQQQQASATGSS QPAAESSTQQ RPGVPAGPRP LDGYLGVADH KPLKMHCRDC ALVTSSGHLL HSRQGSQIDQ TECVIRMNDA PTRGYGRDVG NRTSLRVIAH SSIQRILRNR HDLLNVSQGT VFIFWGPSSY MRRDGKGQVY NNLHLLSQVL PRLKAFMITR HKMLQFDELF KQETGKDRKI SNTWLSTGWF TMTIALELCD RINVYGMVPP DFCRDPNHPS VPYHYYEPFG PDECTMYLSH ERGRKGSHHR FITEKRVFKN WARTFNIHFF QPDWKPESLA INHPENKPVF <HHHHHH>

General References

Kolter, T. et al. (2002) J. Biol. Chem. 277:25859-25862. Okajima, T. et al. (1999) J. Biol. Chem.274:30557-30562. Harduin-Lepers, A. et al. (2005) Glycobiology 15:805-817.

DATA

SDS-PAGE



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