BAC KG ROUND

Sialyltransferase 7E, also known as GD1α synthase or ST6GalNAc V, is a Golgi type II transmembrane glycosyltransferase predominantly expressed in the brain. It belongs to the ST6GalNAc family of sialyltransferases involved in the biosynthesis of α-series gangliosides. Gangliosides are critical components to a variety of cellular events including cell adhesion, protein targeting, cell-cell interaction and mediation of invasion of vectors. They are glycosphingolipids with sialic acids in the carbohydrate portion. Sialyltransferase 7E is specific for the substrate GM1b, leading to the synthesis of the ganglioside GD1α. In addition, Sialyltransferase 7E can catalyze the synthesis of disialyl Lac4 from sialyl Lac4, leading to the synthesis of disialyl Lewis a.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: ST6GALNAC5 (human) mapping to 1p31.1; St6galnac5 (mouse) mapping to 3 H3.