



# Recombinant Protein Technical Manual

**Recombinant Mouse ST6GAL1 Protein (His Tag)(Active)**  
RPES4839

## Product Data:

**Product SKU:** RPES4839

**Size:** 20µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** NP\_666045.1

## Protein Information:

**Molecular Mass:** 45.9 kDa

**AP Molecular Mass:** 50-55 kDa

**Tag:** N-His

**Bio-activity:** Measured by its ability to transfer Neu5Ac from CMP-Neu5Ac to N-Acetyllactosamine. The specific activity is > 150 pmol/min/µg.

**Purity:** > 96 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** AW742324;Siat1;St6gal;St6Gal-I;St6gall

## Immunogen Information:

**Sequence:** Lys 27-Cys 403

## Background:

Beta-galactoside alpha-2,6-sialyltransferase 1, also known as B-cell antigen CD75, Sialyltransferase 1, CMP-N-acetylneuraminate-beta-galactosamide-alpha-2,6-sialyltransferase 1, ST6GAL1 and SIAT1, is a single-pass type II membrane protein which belongs to the glycosyltransferase 29 family. Sialyltransferases are key enzymes in the biosynthesis of sialoglycoconjugates that catalyze the transfer of sialic residue from its activated form to an oligosaccharidic acceptor. ST6GAL1 / SIAT1 is normally found in the Golgi but which can be proteolytically processed to a soluble form. It is involved in the generation of the cell-surface carbohydrate determinants and differentiation antigens HB-6, CDw75, and CD76.  $\beta$ -Galactoside  $\alpha$ 2,6-sialyltransferases ST6GAL1 and ST6GAL2 are the two unique members of the ST6GAL family described in higher vertebrates. ST6GAL1 / SIAT1 transfers sialic acid from the donor of substrate CMP-sialic acid to galactose containing acceptor substrates.