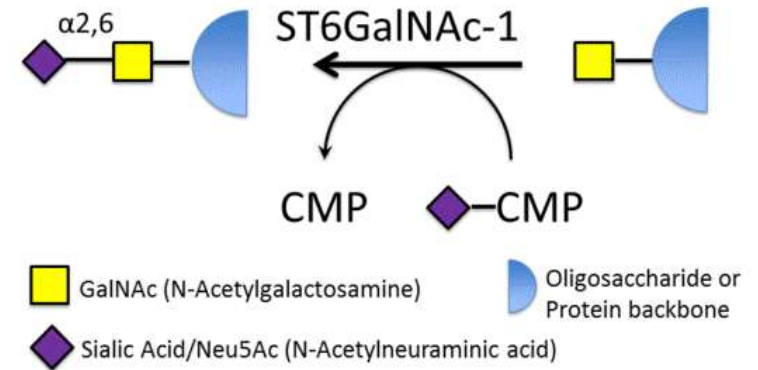


ST6GalNAc1, soluble fragment, Human Recombinant

CATALOG NO:	P1223-5	5 µg
ALTERNATE NAMES:	Beta-1,4-galactosyltransferase 1, UDP-Gal:beta-GlcNAc beta-1,4-galactosyltransferase 1, UDP-galactose:beta-N-acetylglucosamine beta-1,4-galactosyltransferase 1, Beta-1,4-GalTase 1, Beta4Gal-T1	
SOURCE:	Insect Cells	
PURITY:	> 90% by SDS - PAGE	
MOL. WEIGHT:	50- 60 kDa	
FORM:	Liquid	
FORMULATION:	Sterile filtered solution in 20 mM Hepes pH7 and 100 mM NaCl, at a stock concentration of 500 ug/mL.	
STORAGE CONDITIONS:	Stable for 4 weeks at 4°C. Stable for 6 months at -80°C. Avoid repeated freeze-thaw cycles.	
DESCRIPTION:	Alpha-N-acetylgalactosaminide α -2,6-sialyltransferase 1 catalyzes the transfer of sialic acid N-acetylneuraminic acid (Neu5Ac) from cytidine 5'-monophosphono-N-acetylneuraminic acid (CMP-Neu5Ac) to O-linked GalNAc residues in an α -2,6 linkage. ST6GalNAc1 belongs to a large family of Golgi-membrane-bound sialyltransferases that is responsible for the biosynthesis of sialylated structures, and from which approximately 20 have been cloned to date. The cancer associated sialyl-Tn (sTn) antigen is formed by ST6GalNAc1, through the transfer of Neu5Ac to GalNAc residues on mucins. Addition of a sialic acid to a glyco-protein effectively caps the glycan-chain, preventing further additions. The presence of sialic acid residues extends the half-life of circulating proteins, and are considered to be important for a large variety of biotherapeutics.	
BIOLOGICAL ACTIVITY:	Specific activity > 50 pmol/min/mg. Measured by transfer of NeuAc from CMP-NeuAc to the Tn-peptide MEELGMAPALQPT(GalNAc)QGAMPAF, enzyme reactions containing: 25 mM MES pH 6.5, 20 mM EDTA, 1 mM DTT, 2 mM CMP-NeuAc and 10 µg (400 ug/mL final) Tn-peptide. Final reaction contained 175 ng of ST6GalNAc1. Incubated at 37°C.	



RELATED PRODUCT:

- GalNAc-T2, soluble fragment, Human Recombinant (**Cat. No. P1215**)
- GalNAc-T3, soluble fragment, Human Recombinant (**Cat. No. P1216**)
- GalNAc-T5, soluble fragment, Human Recombinant (**Cat. No. P1217**)
- GalNAc-T16, soluble fragment, Human Recombinant (**Cat. No. P1218**)
- B3GNT6, soluble fragment, Human Recombinant (**Cat. No. P1219**)
- ST3Gal1, soluble fragment, Human Recombinant (**Cat. No. P1222**)

FOR RESEARCH USE ONLY! Not to be used on humans.