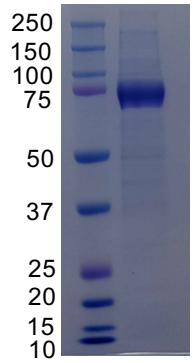
BioF:GREAT
Glycoscience
Research,Education
and Training
biofgreat.org

Product Name	Alpha-2,8-sialyltransferase 8B (ST8SIA2)
Catalog Number	#0030
Alternate Names	ST8SIA2, SIAT8B, STX, Sialyltransferase 8B (SIAT8-B), Sialyltransferase St8Sia II (ST8SiaII), Sialyltransferase X (STX)
Substrate Specificity	May transfer sialic acid through alpha-2,8-linkages to the alpha-2,3-linked and alpha-2,6-linked sialic acid of N-linked oligosaccharides of glycoproteins and may be involved in PSA (polysialic acid) expression.
References	https://doi.org/10.1007/978-4-431-54240-7_77
Expression Host	HEK293
Species of expressed protein	Human
Gene ID	8128
Protein RefSeq	NP_006002
Uniprot	Q92186
Region Expressed	AA 60-375
Expressed Protein Sequence	NGSSSPAVVDRSNESIKHNIQPASSKWRHNQTLSLRIRKQILKFLDAEKDISVLKGTLKP GDIIHYIFDRDSTMNVSQNLYELLPRTSPLKNKHFGTCAIVGNSGVLLNSGCGQEIDAHS FVIRCNLAPVQEYARDVGLKTDLVTMNPSVIQRAFEDLVNATWREKLLQRLHSLNGSIL WIPAFMARGGKERVEWVNELILKHHVNVRTAYPSLRLLHAVRGYWLTNKVHIKRPTTGL LMYTLATRFCKQIYLYGFWPFPLDQNQNPVKYHYYDSLKYGYTSQASAHTMPLEFKALK SLHEQGALKLTVGQCDGAT
Tag(s)	N-terminal 6xHis, GFP
Purity (%)	>95%, by SDS-PAGE as visualized by Coomassie Blue Staining
Formulation	Supplied as a 0.2µm filtered solution in 20mM HEPES pH 7.0 and 100mM NaCl buffer, with 10% Glycerol and 0.05 % NaN_3 as preservative.
Concentration	1 mg/ml
SDS-Page Size	~100 kDa
SDS-PAGE image	
Assay Buffer	0.1 M sodium cacodylate buffer pH 6.0, 10 mM MgCl2, 2 mM CaCl2, 0.5 % Triton CF-54
Donor Substrate	CMP-NeuAc
Assay Steps	The activity was measured by incubating the purified enzyme solution in a reaction mixture consisting of 0.1 M sodium cacodylate buffer (pH 6.0), 10 mM MgCl2, 2 mM CaCl2, 0.5 % Triton CF-54, 100 mM CMP-[14C]Neu5Ac, and 1 mg/ml acceptor substrate for 4–24 h at 37 °C and then analyzing the reaction product by SDS-PAGE, paper chromatography, or anion-exchange chromatography. The radioactive materials in glycoproteins can be visualized or measured with a bioimage analyzer or scintillation counter. (Please refer to https://doi.org/10.1007/978-4-431-54240-7_77)

Shipping conditions	This product is shipped as 0.2µm filtered product on dry ice. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage conditions:	
6 months	6 months if stored at -80ºC. Avoid repeated freeze thaws.