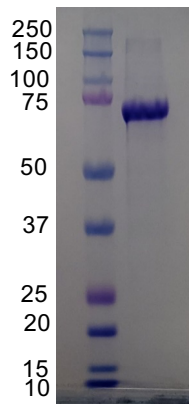


Product Name	Glycoprotein-N-acetylgalactosamine 3-beta-galactosyltransferase 1 Dm C1GALT1
Catalog Number	#0024
Alternate Names	Core 1 O-glycan T-synthase, Core 1 UDP-galactose:N-acetylgalactosamine-alpha-R beta 1,3-galactosyltransferase 1, Core 1 beta1,3-galactosyltransferase 1 (C1GalT1; Core 1 beta3-Gal-T1)
Substrate Specificity	Glycosyltransferase that generates the core 1 O-glycan Gal-beta1-3GalNAc-alpha1-Ser/Thr (T antigen), which is a precursor for many extended O-glycans in glycoproteins.
References	References: [1] Ju, T. and Cummings, R.D. (2013) "Core 1 b3Galactosyltransferase (C1GALT1, T-Synthase) and its specific molecular chaperone Cosmc (C1GALT1C1" in Handbook of Glycosyltransferases and Related Genes, 2nd edition.
Expression Host	HEK293
Species of expressed protein	Drosophila melanogaster (fruit fly)
Gene ID	34215
Protein RefSeq	NP_609258
Uniprot	Q7K237
Region Expressed	AA 43-388
Expressed Protein Sequence	TPERSEFMPYDGHHRHGDVNDAAHSHSDMMMSGPEQDVGGHEHVHENSTIAERLYSEVRV LCWIMTNPSNHQKKARHVKRTWGKRCNKLIFMSSAKDDELDAVALPVGEGRNNLWGKTKE AYKYIEHHINDADWFLKADDDTYTIVENMRYMLYPYSPETPVYFGCKFKPYVKQGYMSGG AGYVLSREAVRRFVVEALPNPKLCKSDNSGAEDVEIGKCLQNVNVLAGDSRDSNGRGRFF PFVPEHHLIPSHTDKKFYQYIFYKTDEGLDCCSDNAISFHYVSPNQMYVLDYLIYHLRPY GIINTPDALPNKLAVGELMPEIKEQATESTSDGVSKRSAETKTQ
Tag(s)	N-terminal 6xHis, GFP
Purity (%)	>95%, by SDS_PAGE under reducing conditions and visualized by Coomassie Blue stain.
Formulation	Supplied as a 0.2µm filtered solution in 20mM HEPES and 100mM NaCl buffer, pH 7.0, with 10% Glycerol and 0.05 % NaN ₃ as preservative.
Concentration	1 mg/ml
SDS-Page Size	~70 kDa
SDS-PAGE image	



Activity	Measured by the ability to transfer the sugar from UDP-Gal and generate UDP
Assay Buffer	Universal Buffer: 100mM each MES, MOPS, TRIS, pH 7.0, 1mg/ml BSA, 5mM MnCl ₂
Donor Substrate	UDP-Gal (0.2mM, Promega)
Acceptor Substrate	
Detection Kit	UDP-Glo™ Glycosyltransferase Assay kit (Promega)
Specific Activity calculation	Follow protocol for "Generating a Standard Curve for UDP" in the UDP-Glo™ Glycosyltransferase Assay Technical Manual (Promega) Note: Use Universal buffer (250mM each MES, MOPS, TRIS, pH 7.5).

Shipping conditions

Specific Activity (umol/min/mg)= UDP released*(umol) / [Incubation time (min) x amount of enzyme (mg)], Specific Activity was calculated using the standard curve plotted in GraphPad Prism 6 (GraphPad Software)

Stability & Storage conditions:

This product is shipped as 0.2µm filtered product on dry ice. Upon receipt, store it immediately at the temperature recommended below.

6 months

6 months if stored at -80C. Avoid repeated freeze thaws.