



Modeling of human herpesvirus 8 signal transducing membrane glycoprotein

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Abstract

Modeling of human herpesvirus 8 signal transducing membrane glycoprotein was done and valuable information about its structural details was revealed.

Key words: Modeling, human herepesvirus 8, glycoprotein,

Introduction

Viral proteins play an important role in their actions and study of their structural details would be of great importance.

Materials and Methods

Protein

The amino acid sequence of human herpesvirus 8 signal transducing membrane glycoprotein sequence was downloaded from GenBank KC859950.1 and used for modeling.

Modelling software

<https://swissmodel.expasy.org> was reached to model the protein.

Project Summary

Targe	MLLCRLYSLLVCFPTLLSLHLPSFPHLCPGVISTPYTLTSPNSRSLPISWYCNGTRLHRL	90
t 1	TASNLTVSSLTCNFTCMTTSGPTHSIWIEW	
Targe	YTQPVLQTLCAQPSNTVSCGQPVTLYCDTSSNNVTIWRLQNGHNQTVSQTKYYNFTMMNQ	18
t 1	TQGCYTCSNGLSSRSLSNRICFWASCINITP	0
Targe	ETPTVSASSTMAVKVLRNGLLKIIPATTHAAVAVEEVKSTNRHIQVPFLVFMFLVALIG	27
t 1	TMCGILGTLIFTHCQKSDSSKTGQQQLRD	0
Targe	YYSLDYFHTEDYTPVDWY	28
t 1		9

Template Results

A total of 1570 templates were found to match the target sequence. This list was filtered by a heuristic down to 50. The top templates are:

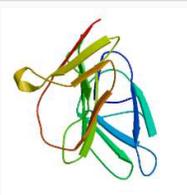
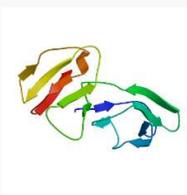


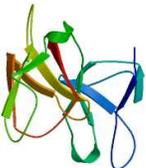
Template	Sequence Identity	Biounit Oligo State	Description
5vl3.4	22.58	hetero-trimer	B-cell receptor CD22 CD22 d1-d3 in complex with therapeutic Fab Epratuzumab
9rob.1	21.77	monomer	B-cell receptor CD22 Crystal structure of human CD22 Ig domains 1-3 in complex with
4x9f.1	16.80	homo-dimer	Down Syndrome Cell Adhesion Molecule isoform 6.9 Crystal structure of Dscam1 isoform 6.9, N-terminal four Ig domain
5vl3.2	22.58	hetero-trimer	B-cell receptor CD22 CD22 d1-d3 in complex with therapeutic Fab Epratuzumab
5vkm.1	21.77	monomer	B-cell receptor CD22 Crystal structure of human CD22 Ig domains 1-3 in complex with

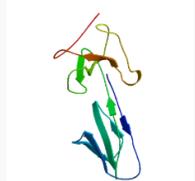
[Show full template details](#)

Model Results

The top models are:

	Id	Template	GMQE	QMEANDisCo Global	Oligo St
	02	8yrj.1.A	0.22	0.47 ± 0.07	monome
	04	6grs.1.B	0.20	± 0.07	monome
	01	5vl3.4.A	0.20	0.42 ± 0.07	monome

	Id	Template	GMQE	QMEANDisCo Global	Oligo St
	03	3wuw.1.C	0.19	± 0.07	monome

	05	6grs.1.A	0.19	0.41 ± 0.07	monome
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