

Deciphering multivalent glycocluster-lectin interactions through AFM characterization of the self-assembled nanostructures

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	Structure, K_d and n	
C1	<p>Calix[4]arene(OMTzEG₃-Gal)₄ $K_d = 170$ nM $n = 0.24$</p>	
P1	<p>Porphyrin(OMTzEG₃-Gal)₄ $K_d = 330$ nM $n = 0.46$</p>	
M1	<p>Man(POProTzEG₃-Gal)₄ $K_d = 11000$ nM $n = 0.28$</p>	

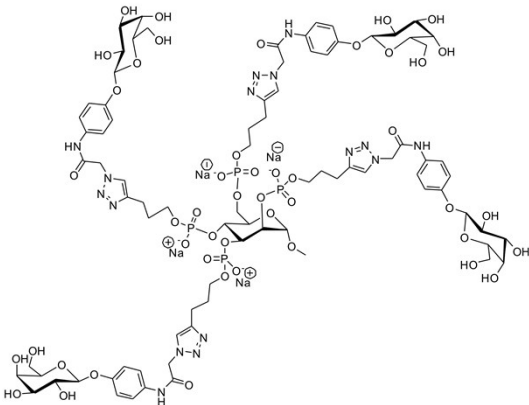
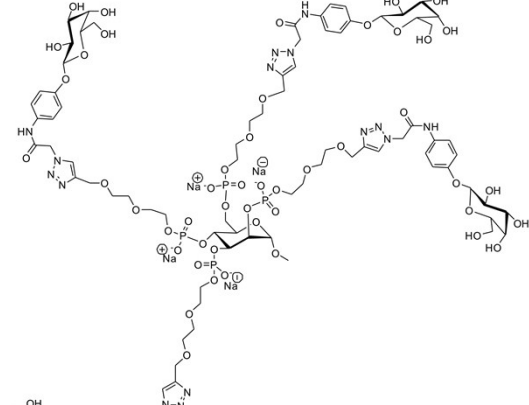
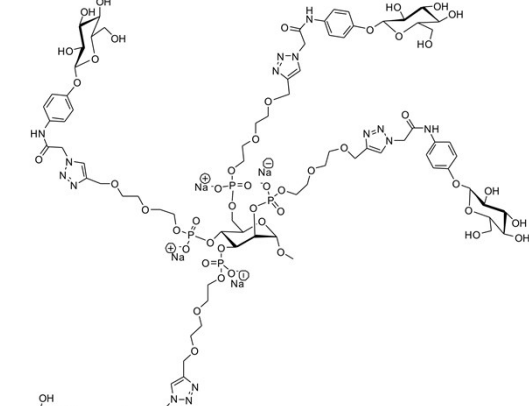
<p>M2</p>	<p>Man(POProTzAcNPh-Gal)₄ $K_d = 194 \text{ nM}$ $n = 0.46$</p>	 <p>The structure shows a central mannose core with four phosphate groups. Each phosphate is linked via a propyl chain to a 1,2,4-triazole ring. The triazole rings are further substituted with an acetamido group and a phenyl ring. The phenyl rings are connected to galactose units, which are shown in their cyclic pyranose form.</p>
<p>M3</p>	<p>Man(POEG₂MTzAcNPh-Gal)₄ $K_d = 157 \text{ nM}$ $n = 0.52$</p>	 <p>The structure is similar to M2, but the propyl chains are replaced by poly(ethylene glycol) (PEG) chains of length 2. The rest of the molecule, including the mannose core, phosphates, triazoles, acetamido groups, and phenyl-galactose linkages, remains the same.</p>
<p>M4</p>	<p>Man(POEG₂MTzAcNPh-Glc)₄ $K_d = \text{n.a.}$ $n = \text{n.a.}$</p>	 <p>The structure is similar to M3, but the galactose units are replaced by glucose units. The rest of the molecule, including the mannose core, phosphates, triazoles, acetamido groups, and phenyl-glucose linkages, remains the same.</p>

Table S1: Structure of the glycoclusters under study.

