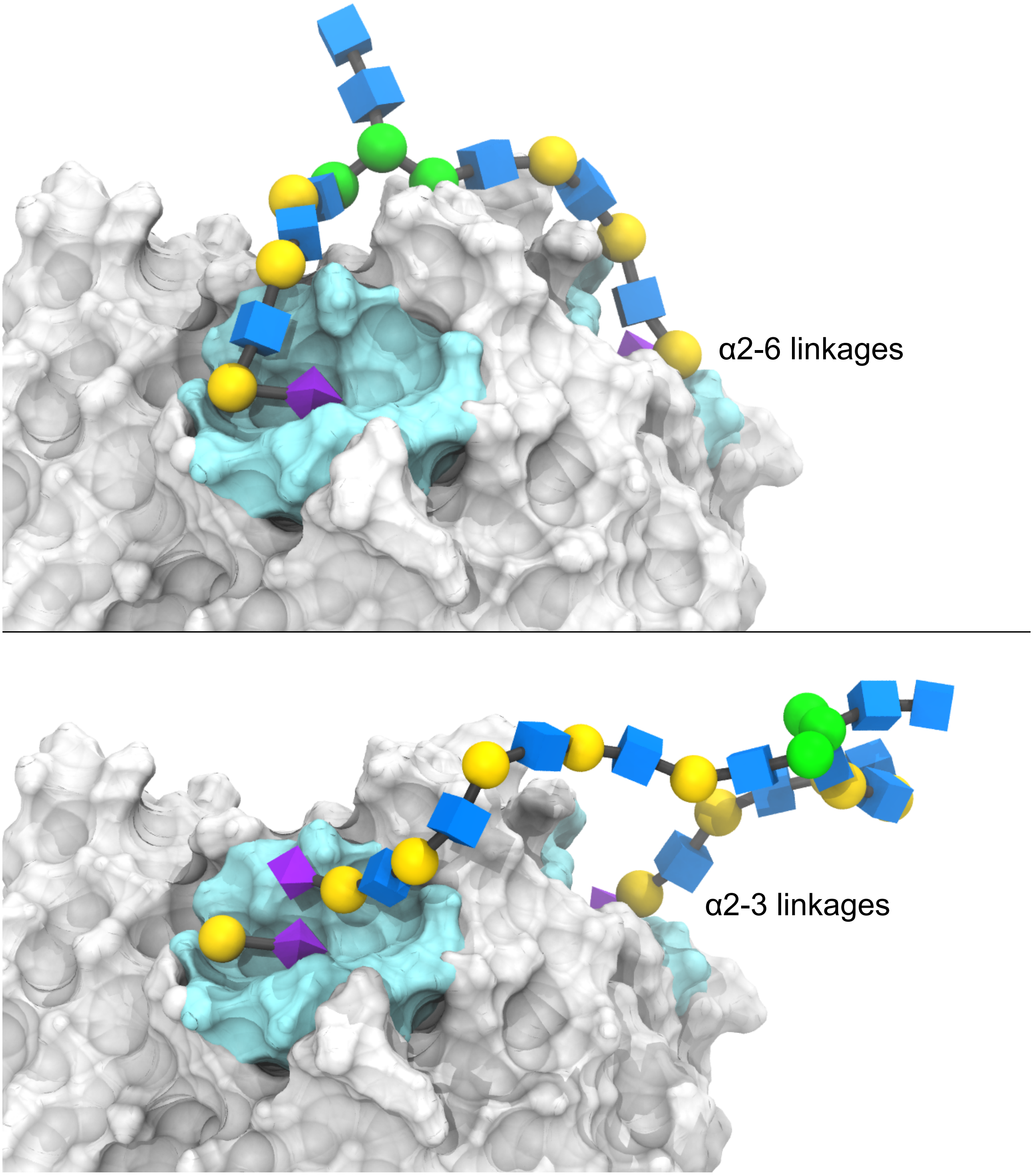
SUPPLEMENTARY FIGURE 1

All of the reference free 2D class averages contain the C-terminal GFP at the base of the HA trimer.

SUPPLEMENTARY FIGURE 2.



In previous work, a 3D structure of an α2-6 biantennary N-glycan with three lacNAc repeats was produced in a bidentate co-complex with HA **(Upper Panel)**. This was modeled by first superimposing the terminal disaccharide onto a disaccharide in a crystal structure co-complex. Then the glycosidic linkages were adjusted within their low energy ranges and dihedral angles were selected that brought the second, unbound motif towards a second binding site. The binding motif was pulled into position during an all-atom molecular dynamics simulation and finally, the restraints were released to determine if the structure was stable. This method produced a bidentate co-complex for α2-6 biantennary N-glycan with three, four or five lacNAc repeats. In contrast, this method did not find bidentate N-glycans with α2-3 linkages. Although N-glycans containing α2-3 linkages and five lacNAc repeats could span both sites (Lower panel), the α2-3 linkage places the motif in the opposite orientation required by the binding site.