

## **SUPPLEMENTAL INFORMATION**

### **Synthetic Three-Component HIV-1 V3 Glycopeptide Immunogens Induce Glycan-Dependent Antibody Responses**

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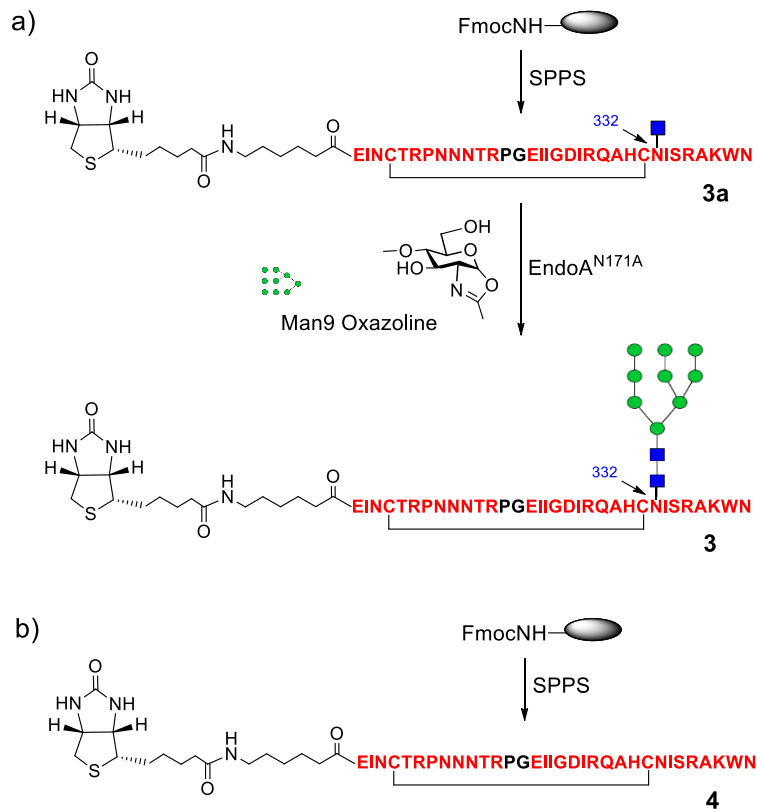


Figure S1, related to Figure 1: Synthesis of 33-mer V3 peptides. a) Chemoenzymatic synthesis of 33-mer V3 high-mannose glycopeptide **3**. b) SPPS Synthesis of 33-mer V3 peptide **4**.

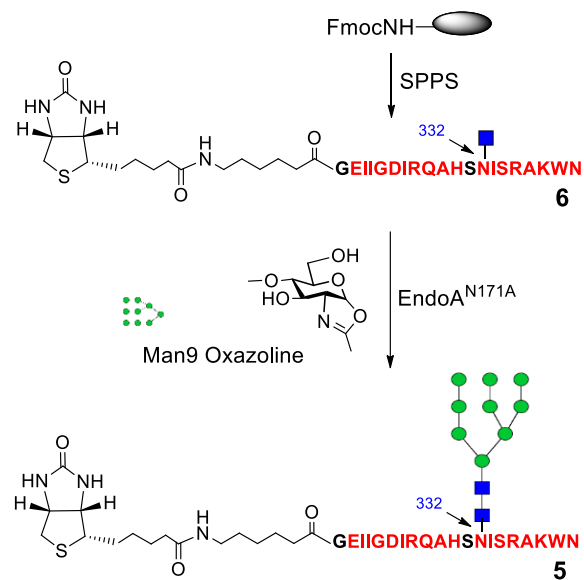


Figure S2, related to Figure 1: Chemoenzymatic synthesis of 20-mer V3 high-mannose glycopeptide **5** and GlcNAc peptide **6**.

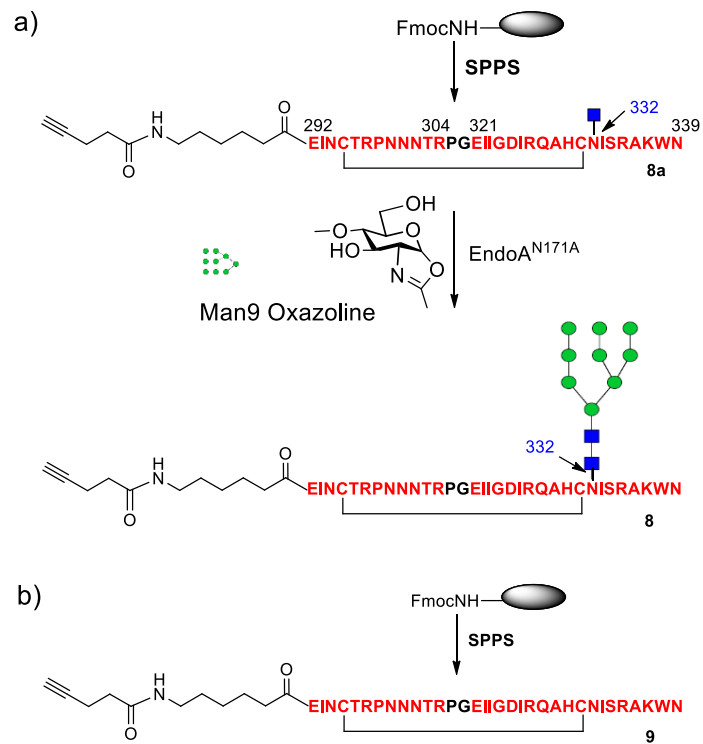


Figure S3, related to Figure 3: Synthesis of alkyne V3 glycopeptide and peptide. a) Chemoenzymatic synthesis of 33-mer V3 high-mannose glycopeptide **8** carrying an alkyne moiety. b) Synthesis of 33-mer V3 peptide **9** carrying an alkyne moiety.

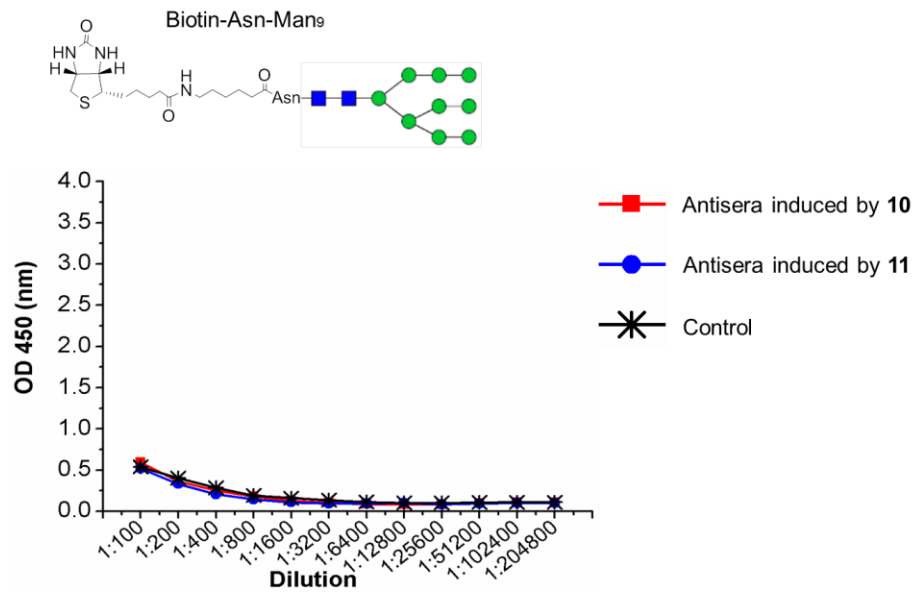


Figure S4, related to Figure 6: ELISA binding of the antisera induced by **10** and **11** to the biotin-labeled high-mannose type N-glycan (Man<sub>9</sub>GlcNAc<sub>2</sub>-Asn).