

**Figure S8.** 3D models for OmaQP23. (a) and (b) Side and top view, respectively, of the monomer cartoon showing the position of the two NPA motifs (red spheres) and the aromatic arginine (ar/R) constriction (orange spheres); (c) and (d) side and top view of the tetramer cartoon; (e) monomer mesh and surface model showing the exposure of the 3 antigenic peptides on the extracellular surface of the molecule: OmaQP23\_A yellow, OmaQP23\_C orange, and OmaQP23\_E cyan. (f) side and top view of tetramer surface model showing peptide exposure.

