## Supporting Information

## Semi-synthetic glycoconjugate vaccine candidates against *Cryptococcus neoformans*

Conor J. Crawford,<sup>1,2,3</sup> Livia Liporagi-Lopes,<sup>2,4</sup> Carolina Coelho,<sup>2,6</sup> Samuel R. Santos Junior,<sup>2</sup> André Moraes Nicola,<sup>2,5</sup> Maggie P. Wear,<sup>2</sup> Raghav Vij,<sup>2,7</sup> Stefan Oscarson,<sup>1\*</sup> Arturo Casadevall<sup>2\*</sup>

<sup>1</sup>Centre for Synthesis and Chemical Biology, University College Dublin, Belfield, Dublin, D04 V1W8, Ireland, <sup>2</sup>Department of Molecular Microbiology and Immunology, Johns Hopkins Bloomberg School of Public Health 615 North Wolfe Street, Baltimore, MD 21205, USA, <sup>3</sup>Present Address: Max Planck Institute for Colloids and Interfaces, Am Mühlenberg1, 14476 Potsdam, Germany.<sup>4</sup>Present Address: Departamento de Análises Clínicas e Toxicológicas, Faculdade de Farmácia, Universidade Federal do Rio de Janeiro, Rio de Janeiro, 21941-902, Brazil, <sup>5</sup>Present Address: Faculty of Medicine, University of Brasília, Brasília, 70910-900, Brazil, <sup>6</sup>Present Address: MRC Centre for Medical Mycology, University of Exeter, Exeter Devon, EX4 4QD, UK. <sup>7</sup> Present address: Leibniz Institute for Natural Product Research and Infection Biology, Jena, 07745, Germany

Email: \* stefan.oscarson@ucd.ie and \* acasade1@jhu.edu

## **Supporting Figures**



• IgG/IgM often cross-reactive to M4 and M1 motif

**SI Figure 1. GXM motifs.** GXM motifs (M1, M2 and M4), demonstrating the antigenic diversity found in the capsule of *C. neoformans*.





## **GXM-CRM197 CPS**



**SI Figure 3. ELISA with capsular polysaccharide and DECA-CRM197 conjugates.** Serum from DECA-CRM197 was examined for binding to CPS-coated ELISA plates and exhibited a higher affinity. Positive control: mAb 18B7; Negative control: irrelevant mAb.



**SI Figure 4. Competition ELISA between mAbs and sera.** Serum from DECA-CRM197 mice vs mAbs 18B7 (IgG1), 13F1 (IgM) and 2D10 (IgM) showed that all three mAbs could compete for the same epitopes.