



Supplemental Data Figure 1. Schematic showing human IgE antibody generation and workflow of filarial antigen discovery. **A**, PBMCs were isolated from blood and processed for *in vitro* expansion of B cells prior to screening for IgE production by ELISA. IgE-producing B cells were fused with a myeloma fusion partner followed by HAT selection and single cell sorting. Each hybridoma was expanded in serum-free media for large-scale mAb production and affinity purification. **B**, IgE mAbs were tested for reactivity to *B. malayi* and *D. immitis* using ELISA, immunoblot, and *B. malayi* ImmunoCAP. IgE mAbs showing reactivity in multiple assays were subjected to IP and mass spectrometry analysis for antigen discovery. Filarial antigens were expressed in *E. coli* as their homolog *W. bancrofti* antigens. IgE mAbs were validated against recombinant antigens by ELISA and immunoblot analysis.