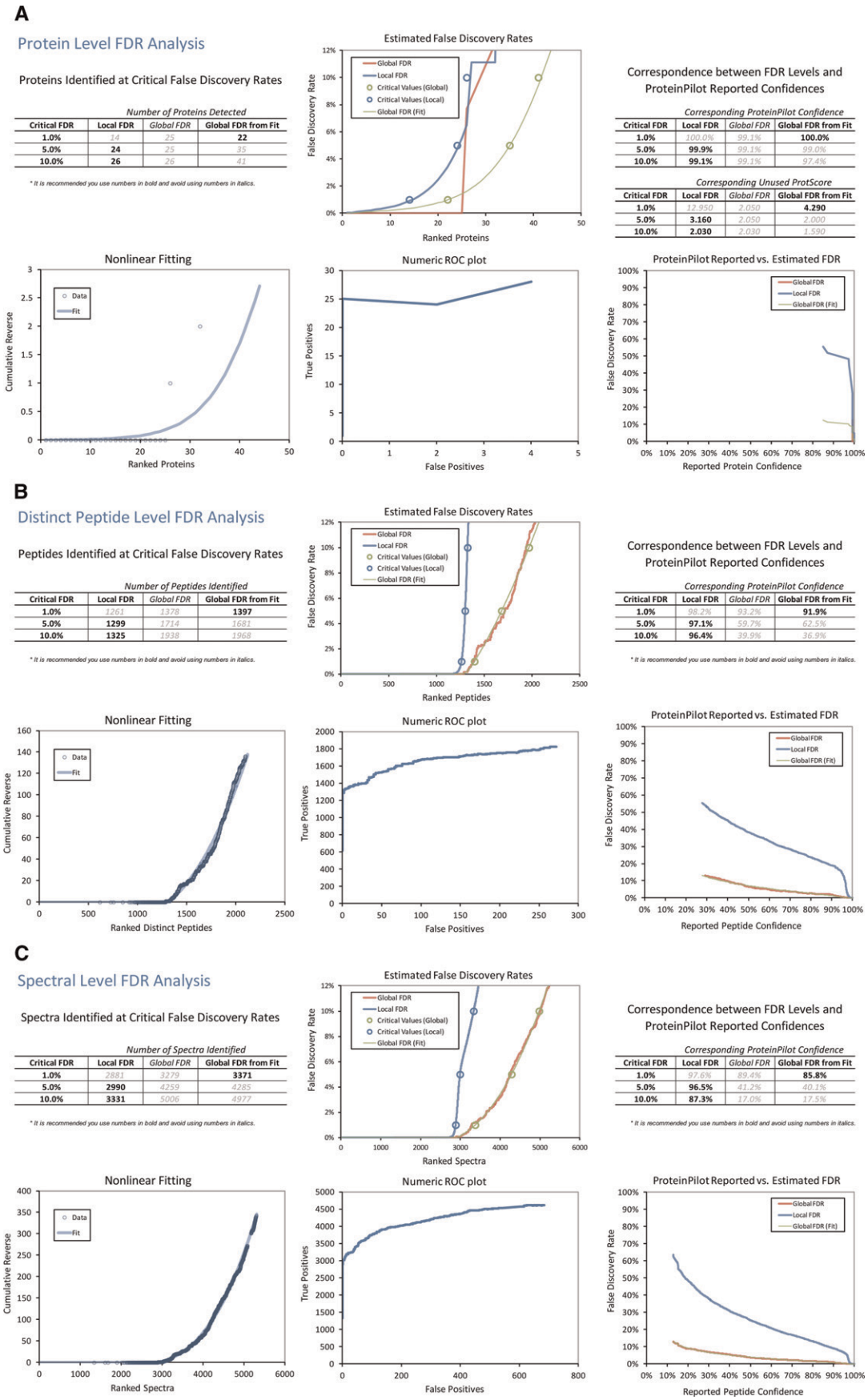
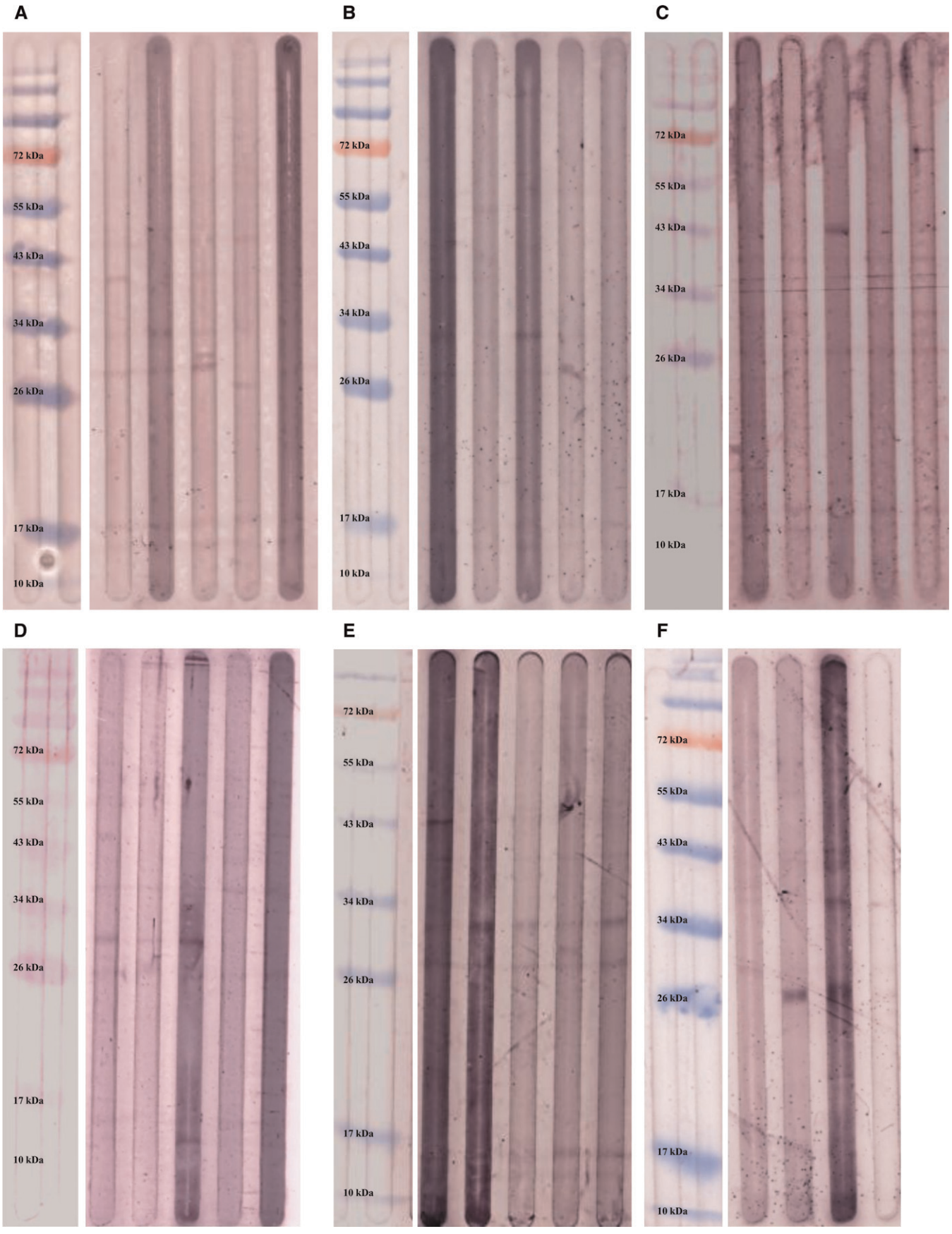
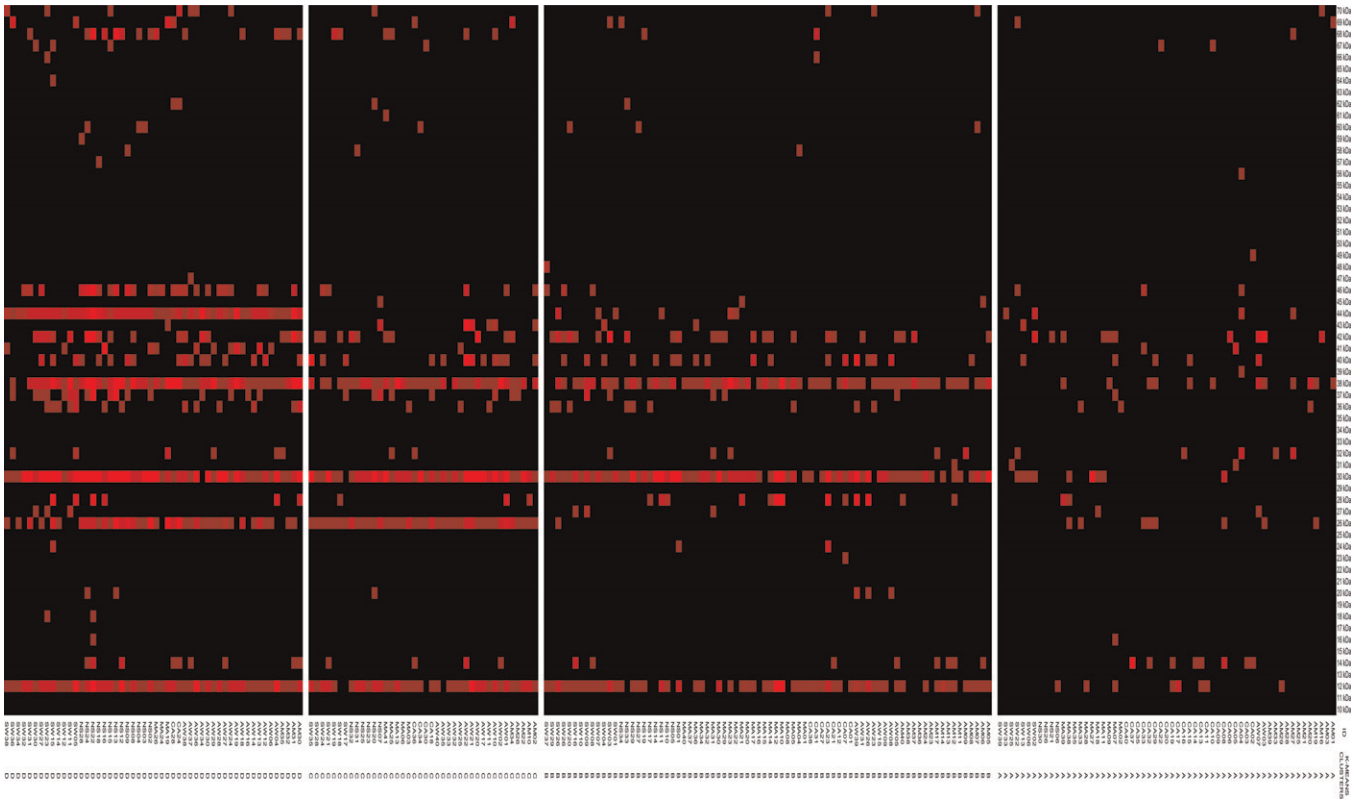


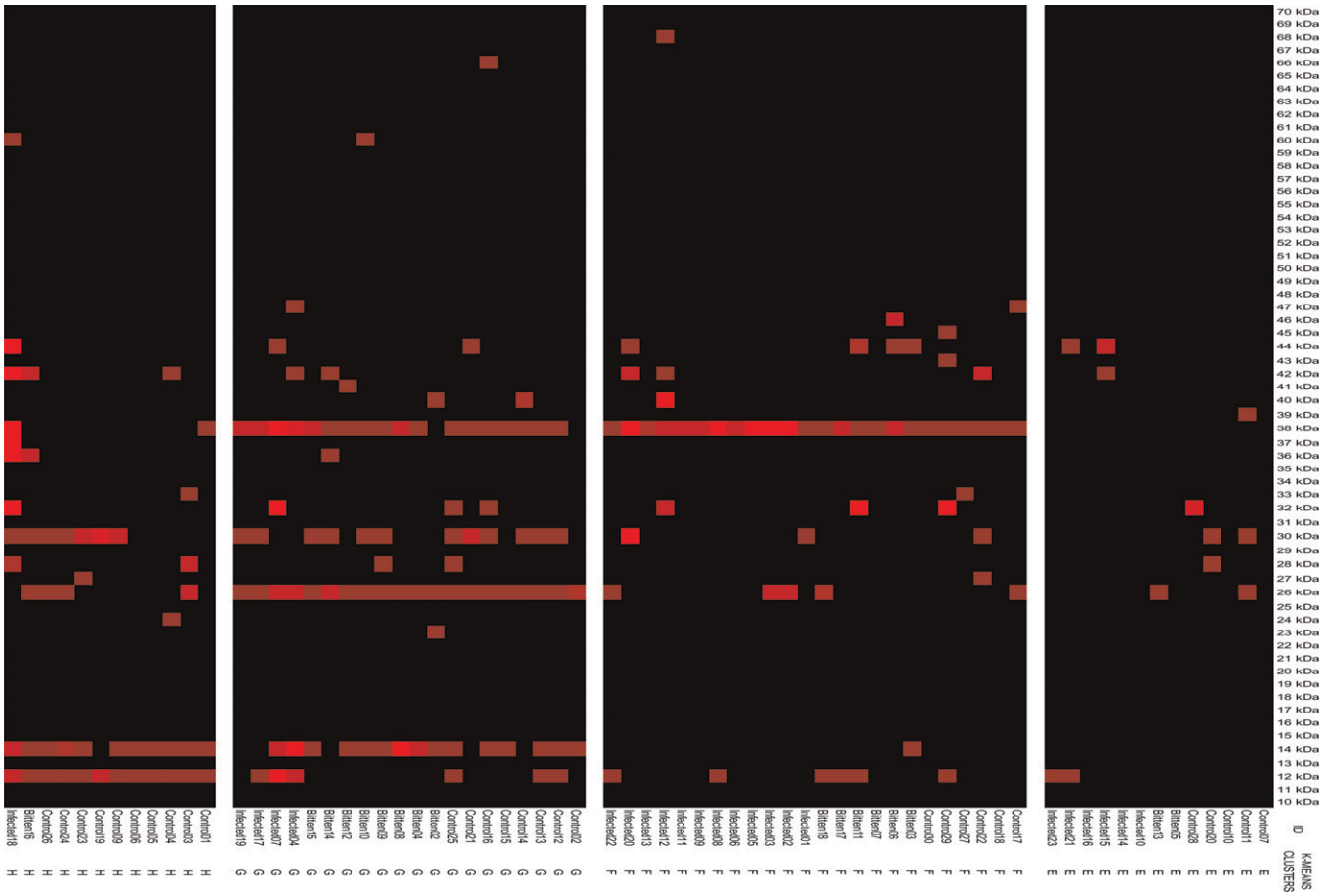
SUPPLEMENTAL FIGURE 1. False discovery rate (FDR) analyses. For all combined protein band data analyzed by mass spectrometry, FDR data by (**A**) protein, (**B**) peptide, and (**C**) spectral levels are given. ROC = Receiver Operating Characteristic.



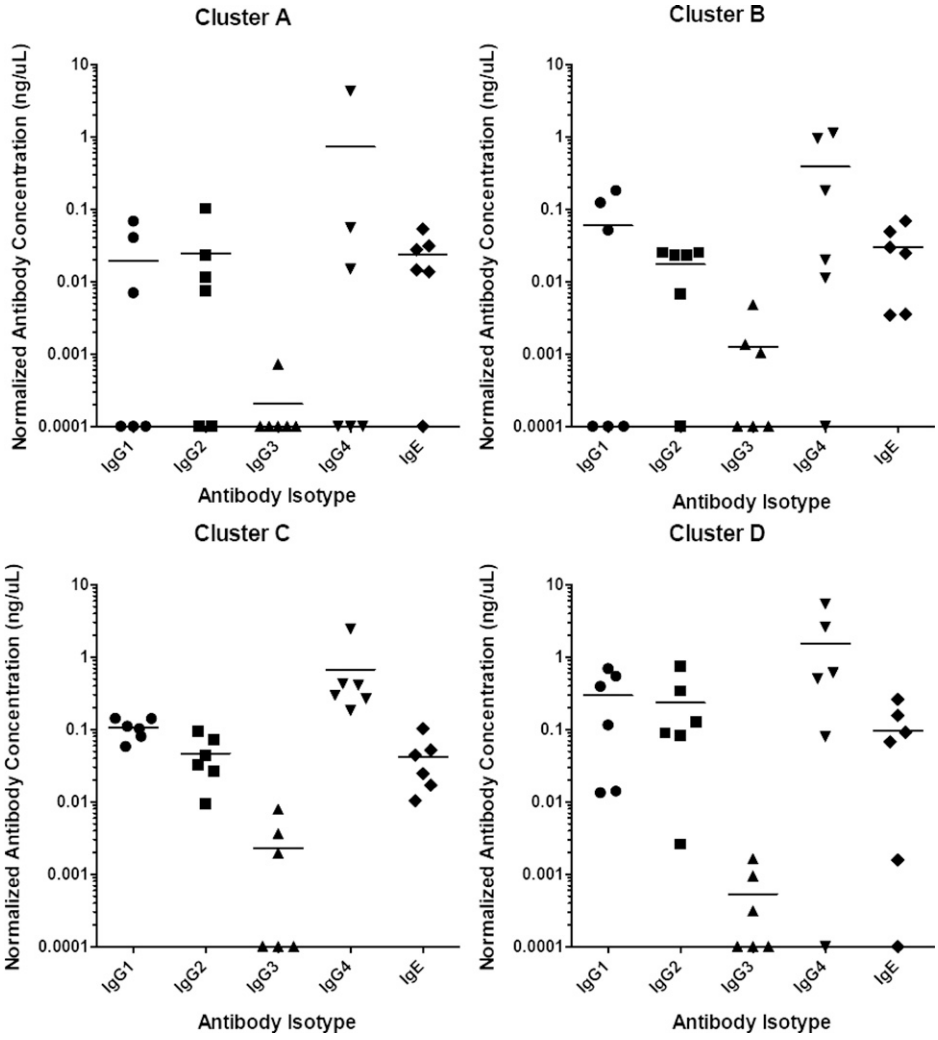
SUPPLEMENTAL FIGURE 2. US military control immunoblots. Western immunoblots (**A**–**F**) 1–6 of salivary gland protein sonicates against plasma antibodies of US military personnel stationed domestically and unexposed to sand flies or *Leishmania* parasites.



SUPPLEMENTAL FIGURE 3. Heat map of antisalivary gland protein sonicate immunoblot scores for Egyptian and Jordanian regional residents. For each molecular weight range of *P. papatasi* salivary gland protein sonicate protein (in kilodaltons), positive antibody immunoreactivity for every human peripheral blood plasma sample is indicated by a red marker. Black markers indicate a lack of antibody immunoreactivity. Individual human donor codes follow the same site abbreviations as indicated in Table 1.



SUPPLEMENTAL FIGURE 4. Heat map of antisalivary gland protein sonicate immunoblot scores for Iraq-based US military personnel. For each molecular weight range of *P. papatasi* salivary gland protein sonicate protein (in kilodaltons), positive antibody immunoreactivity for every human peripheral blood plasma sample is indicated by a red marker. Black markers indicate a lack of antibody immunoreactivity. Individual human donor codes follow the same exposure abbreviations as indicated in Table 1.



SUPPLEMENTAL FIGURE 5. Individual isotyping of antisalivary gland protein sonicate human host plasma antibodies. Human host plasma from individuals in each of six Middle Eastern regions, with most representative of k-medians cluster antibody reactivity profiles to *P. papatasi* salivary gland proteins, were tested using custom indirect enzyme-linked immunosorbent assays. Whole-sandfly salivary protein sonicates were plated as antigens to which host plasma antibodies were bound. Biotin-conjugated secondary anti-human immunoglobulin (Ig) isotype antibodies plus strepavidin-conjugated horseradish perioxidase were used to detect primary plasma antibody reactivity to salivary gland protein sonicate at a 405-nm wavelength. Results were normalized to a common positive control donor plasma. Data were separated by k-means clusters (i.e., A–D). Each data point represents the antisalivary gland protein sonicate plasma antibody concentration of a given isotype for a single donor in that k-means cluster. Each national region was assayed using representative donor plasma for every cluster ($N = 6$ per cluster).