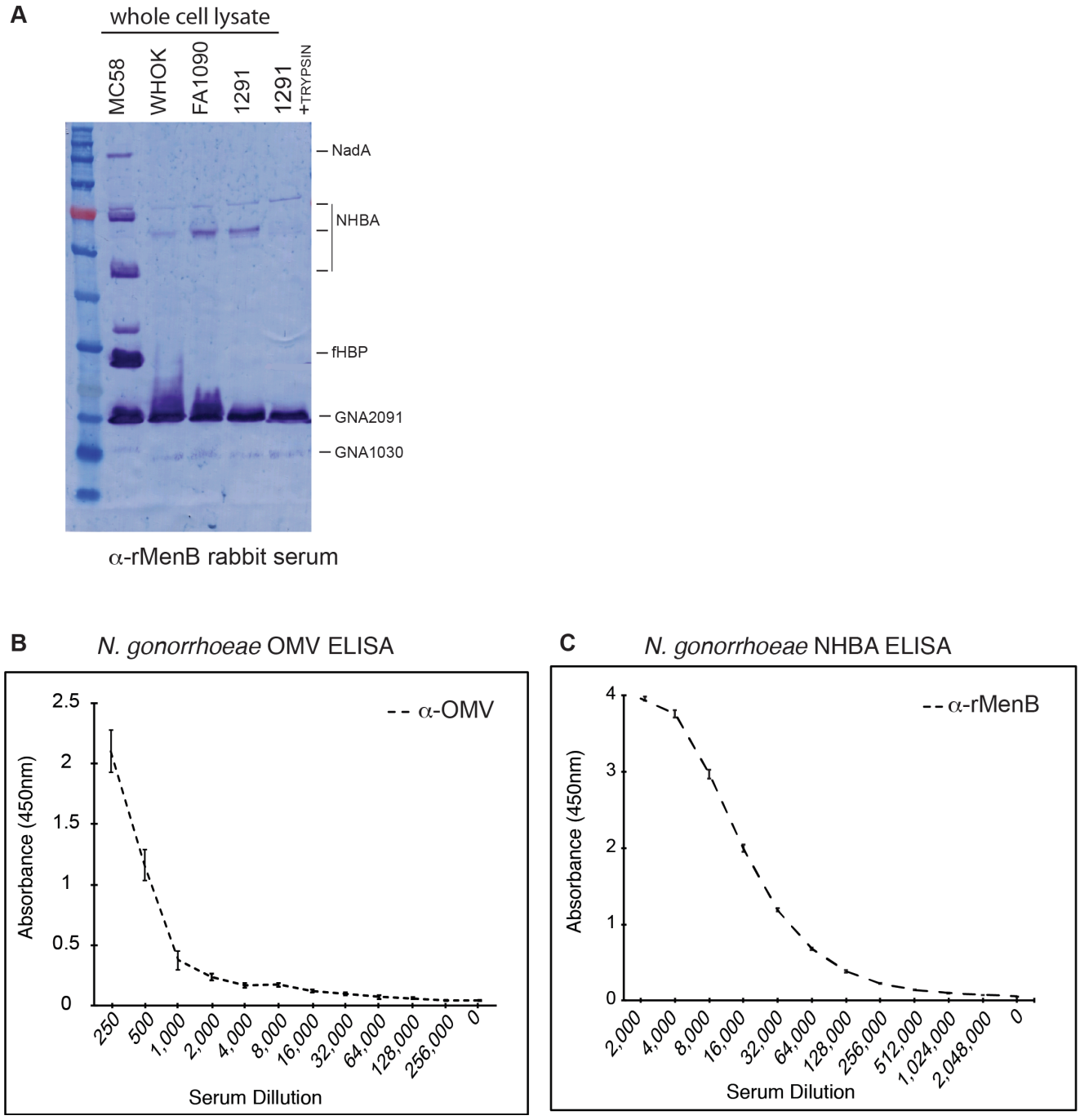

Figure S1. Reactivity of rabbit serum raised against Bexsero antigens to *N. gonorrhoeae* antigens. (A) Digitally overexposed Western blot with rabbit serum immunised to the recombinant protein component of Bexsero (α-rMenB), from figure 2C. Samples shown are whole cell lysates from *N. meningitidis* (strain MC58) and *N. gonorrhoeae* (strains WHO K, FA1090, 1291), and *N. gonorrhoeae* strain 1291 treated with trypsin for 60 min to remove surface proteins (1291+TRYPSIN). **(B-C)** Enzyme linked immunosorbent assay (ELISA) titration curves of rabbit serum immunised with the NZ98/254 outer membrane vesicle component of Bexsero (α-OMV), and rabbit serum immunised to the recombinant protein component of Bexsero (α-rMenB) against *N. gonorrhoeae* strain 1291 **(B)** OMV or **(C)** recombinant NHBA (rNHBA), respectively. The average absorbance (+/- standard deviation) at 450 nm is shown versus reciprocal serum dilutions.

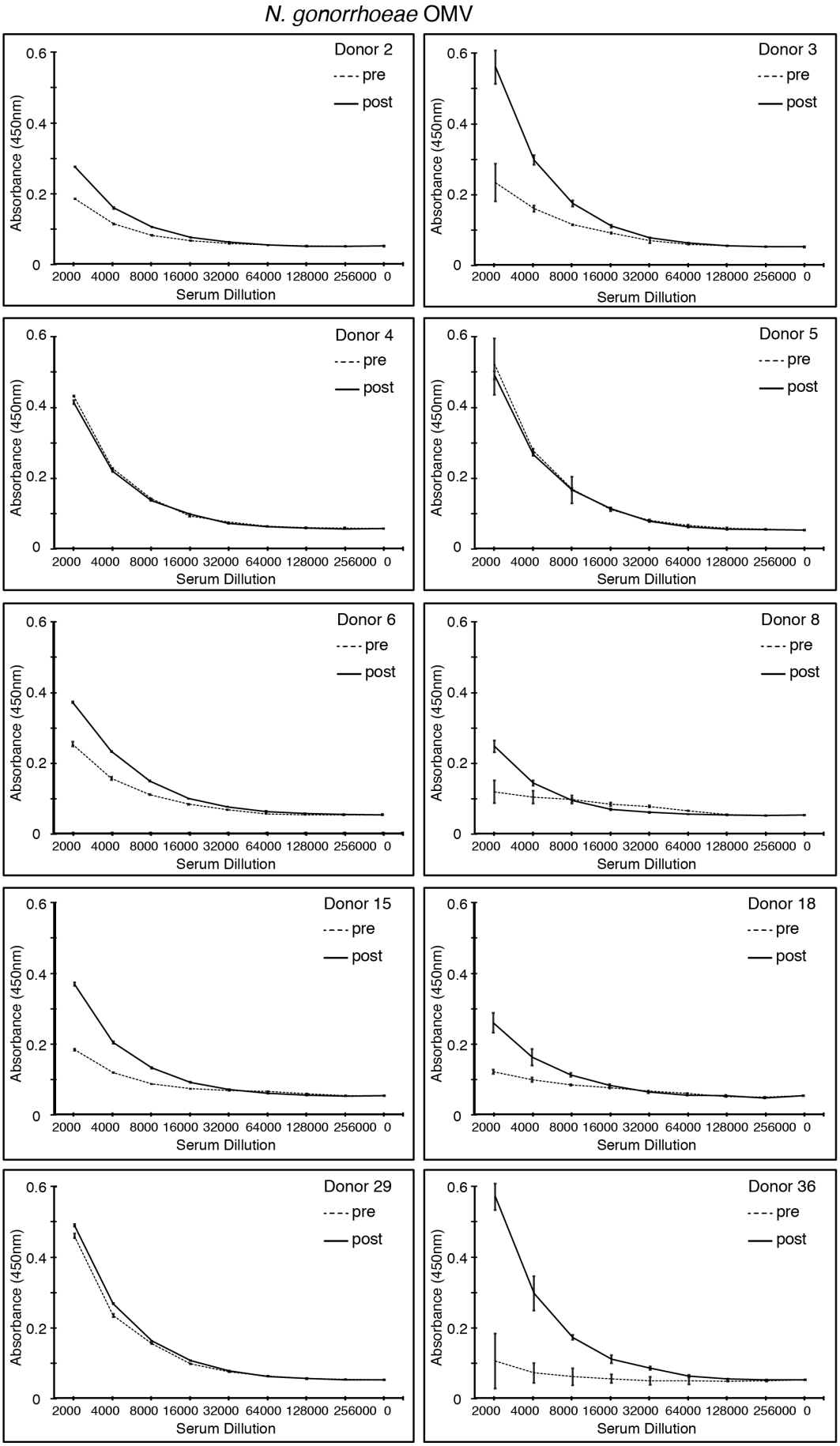

Figure S2. Reactivity of Bexsero-vaccinated human serum to *N. gonorrhoeae* outer membrane vesicle (OMV) antigens. Enzyme linked immunosorbent assay (ELISA) titration curves of Bexsero-vaccinated human serum from ten donors vaccinated with three doses of Bexsero at zero, three and six months. Each panel shows one donor, with reactivity of pre-vaccination serum (month 0, dashed line) and one-month post dose 3 (month 7, solid line) against *N. gonorrhoeae* strain 1291 OMVs. The average absorbance (+/- standard deviation) at 450 nm is shown versus reciprocal serum dilutions.

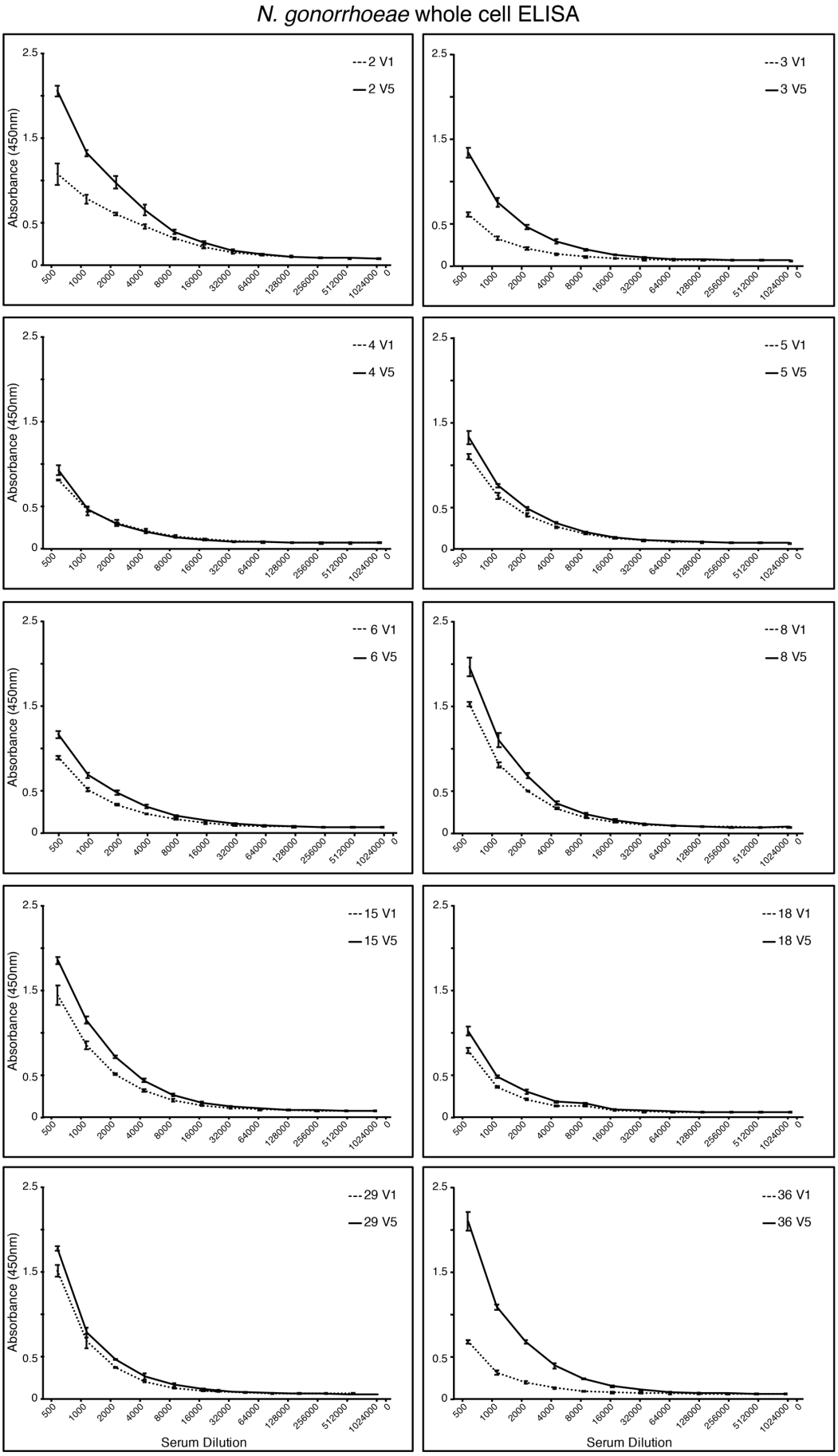

Figure S3. Reactivity of Bexsero-vaccinated human serum to whole cell *N. gonorrhoeae*. Enzyme linked immunosorbent assay (ELISA) titration curves of Bexsero-vaccinated human serum from ten donors vaccinated with three doses of Bexsero at zero, three and six months. Each panel shows one donor, with reactivity of pre-vaccination serum (month 0, dashed line) and one-month post dose 3 (month 7, solid line) against whole cell *N. gonorrhoeae* strain 1291. The average absorbance (+/- standard deviation) at 450 nm is shown versus reciprocal serum dilutions.

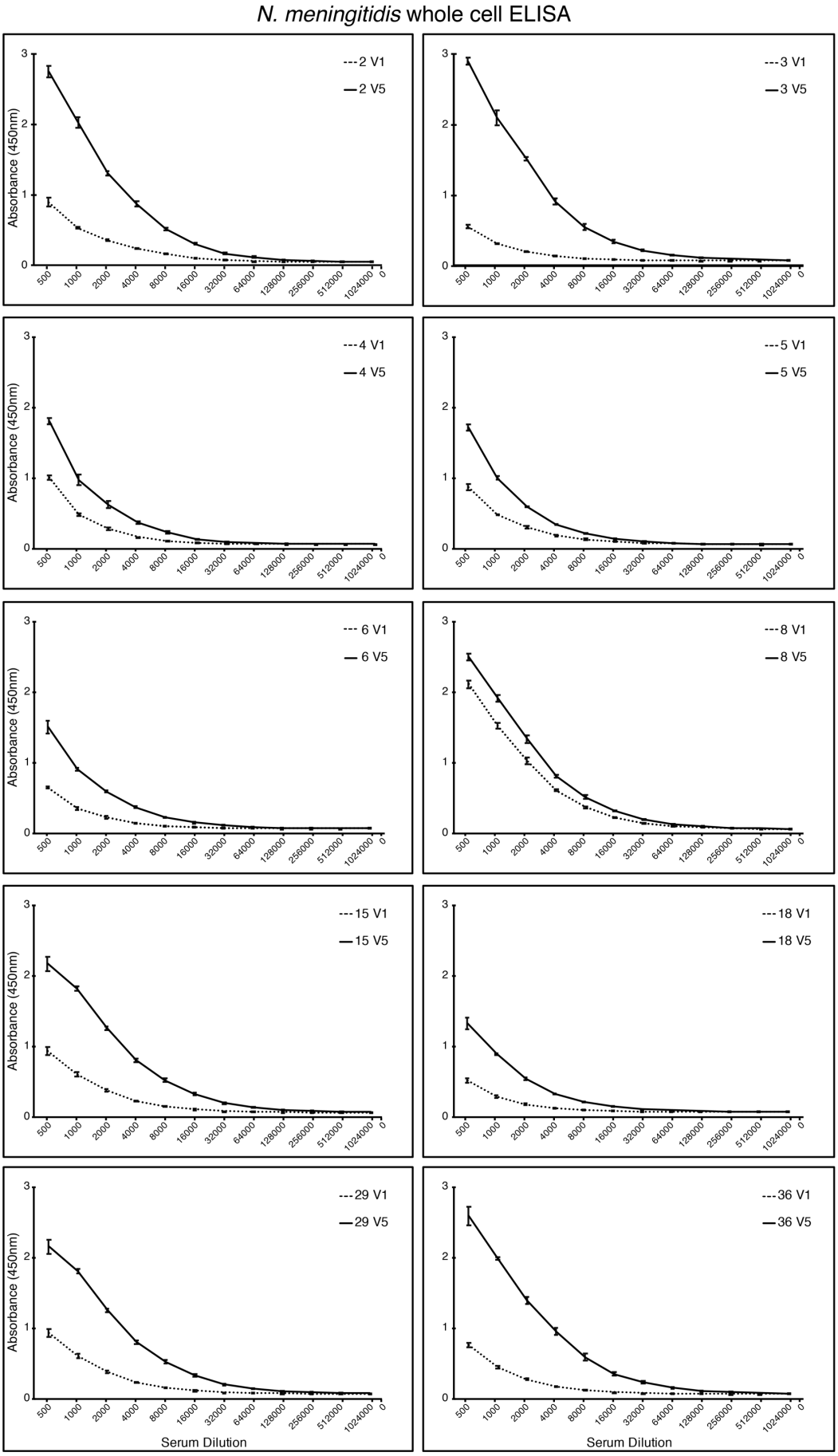

Figure S4. Reactivity of Bexsero-vaccinated human serum to whole cell *N. meningitidis*. Enzyme linked immunosorbent assay (ELISA) titration curves of Bexsero-vaccinated human serum from ten donors vaccinated with three doses of Bexsero at zero, three and six months. Each panel shows one donor, with reactivity of pre-vaccination serum (month 0, dashed line) and one-month post dose 3 (month 7, solid line) against whole cell *N. meningitidis* strain MC58. The average absorbance (+/- standard deviation) at 450 nm is shown versus reciprocal serum dilutions.

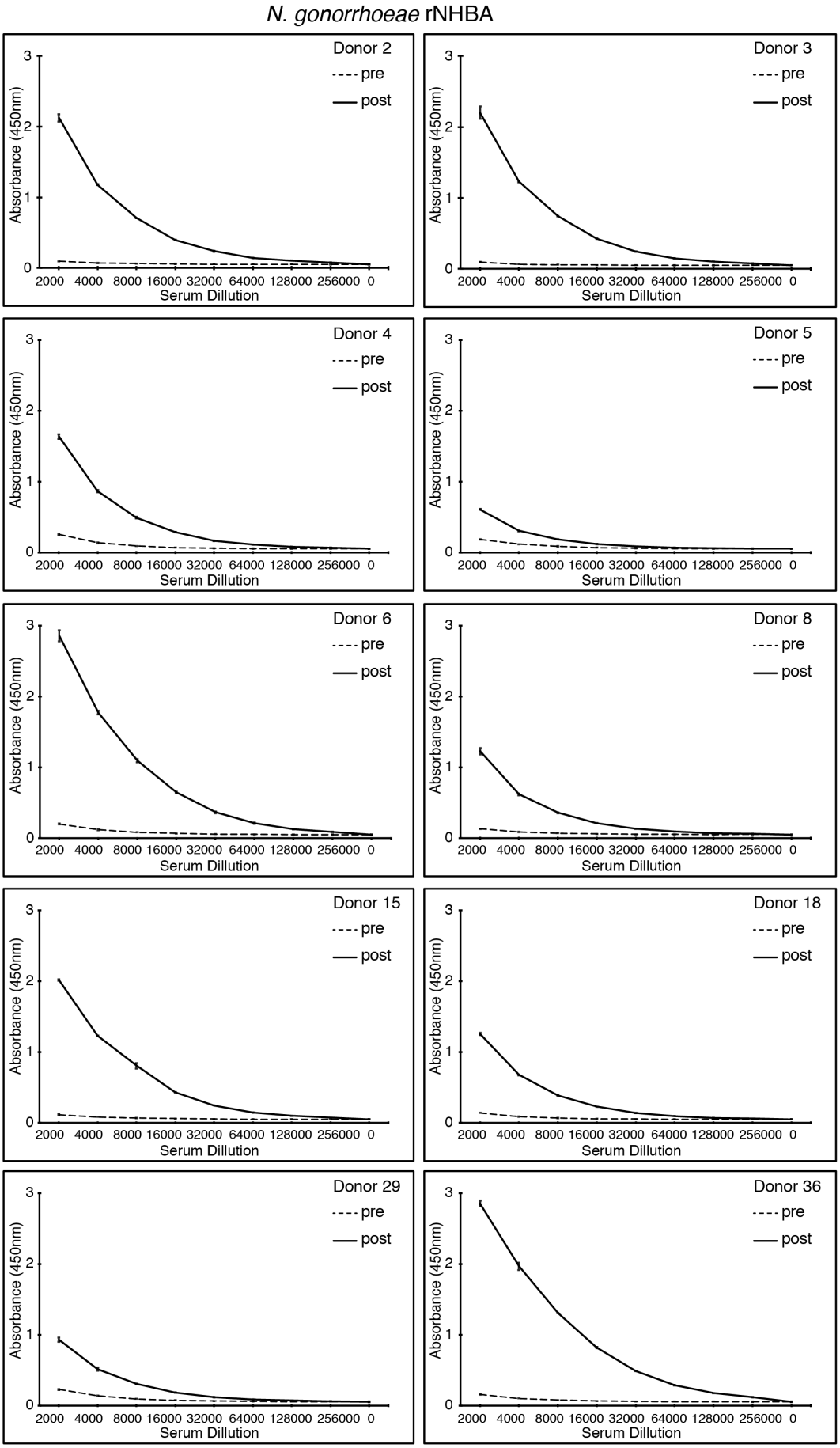

Figure S5. Reactivity of Bexsero-vaccinated human serum to *N. gonorrhoeae* recombinant NHBA (rNHBA). Enzyme linked immunosorbent assay (ELISA) titration curves of Bexsero-vaccinated human serum from ten donors vaccinated with three doses of Bexsero at zero, three and six months. Each panel shows one donor, with reactivity of pre-vaccination serum (month 0, dashed line) and one-month post dose 3 (month 7, solid line) against *N. gonorrhoeae* strain 1291 rNHBA. The average absorbance (+/- standard deviation) at 450 nm is shown versus reciprocal serum dilutions.

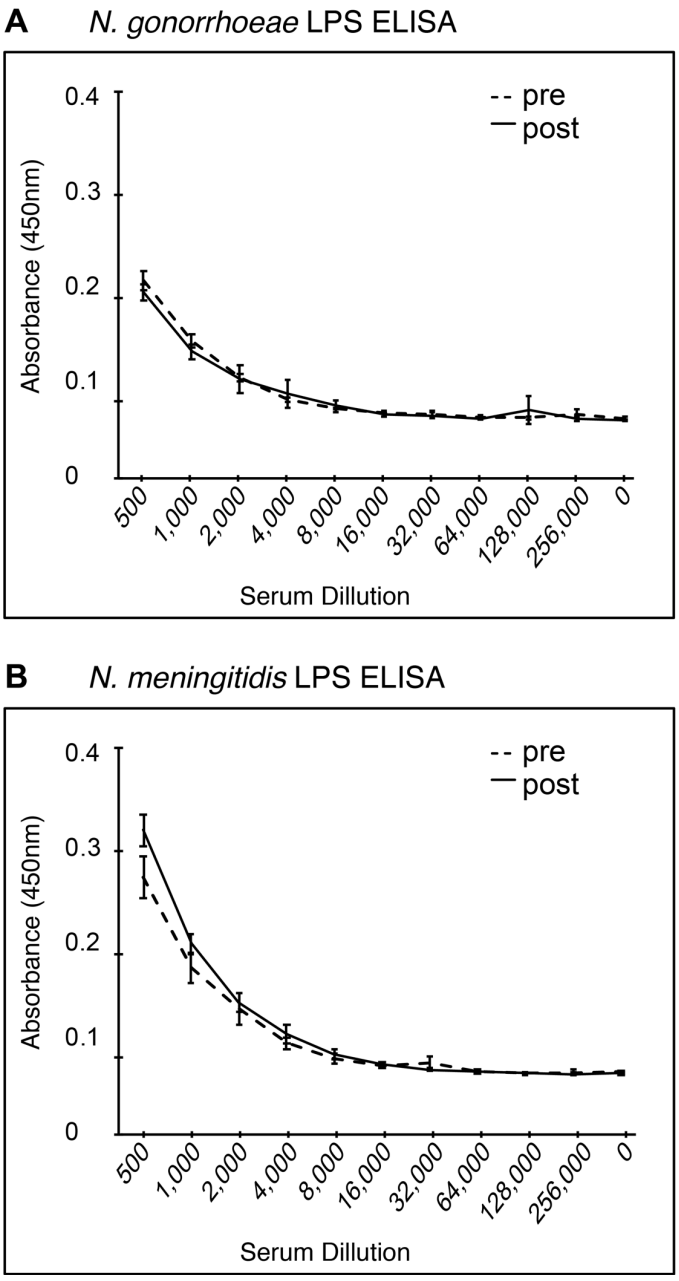

Figure S6. Reactivity of Bexsero-vaccinated human serum to lipooligosaccharide (LPS) from *N. gonorrhoeae* and *N. meningitidis.* Enzyme linked immunosorbent assay (ELISA) titration curves of pooled Bexsero-vaccinated human serum from ten donors vaccinated with three doses of Bexsero at zero, three and six months. Each panel shows with reactivity of pre-vaccination serum (dashed line) and one-month post final dose (solid line) against L3 LPS from (A) *N. gonorrhoeae* strain 1291 and **(B)** *N. meningitidis* strain MC58. The average absorbance (+/- standard deviation) at 450 nm is shown versus reciprocal serum dilutions.