

Supplemental Table 1 | Full RSV-F IgG ELISA Titers for Figure 9A

| Expt | Immunogen | Animal Number ^A | | | | | | Avg. ^A | s.d. ^A | P value ^B vs sF | P value ^B vs wtRSV |
|---------|-----------|----------------------------|------|------|------|------|------|-------------------|-------------------|-------------------------------|----------------------------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | | | | |
| No. 194 | sF | 19.6 | 20.6 | 20.6 | 20.6 | 21.6 | | 20.6 | 0.7 | | |
| | wtRSV | 17.6 | 15.6 | 16.6 | 17.6 | 16.6 | | 16.8 | 0.8 | | |
| | VLP-19 | 17.6 | 16.6 | 17.6 | 17.6 | 16.6 | | 17.2 | 0.5 | $2.8 \times 10^{-5} *$ | 0.40 |
| | VLP-93 | 15.6 | 16.6 | 17.6 | 16.6 | 17.6 | | 16.8 | 0.8 | $5.5 \times 10^{-5} *$ | 1.0 |
| No. 185 | sF | 18.6 | 18.6 | 19.6 | 18.6 | 18.6 | 18.6 | 18.8 | 0.4 | | |
| | wtRSV | 16.6 | 16.6 | 15.6 | 15.6 | 16.6 | 16.6 | 16.3 | 0.5 | | |
| | VLP-75 | 14.6 | 15.6 | 14.6 | 16.6 | 14.6 | 16.6 | 15.4 | 1.0 | $1.7 \times 10^{-5} *$ | 0.096 |
| No. 188 | sF | 22.3 | 21.3 | 22.3 | 20.3 | 22.3 | 22.3 | 21.8 | 0.8 | | |
| | wtRSV | 13.6 | 12.6 | 14.6 | 12.6 | 13.6 | 12.6 | 13.3 | 0.8 | | |
| | VLP-87 | 19.9 | 19.9 | 18.9 | 18.9 | 18.9 | 17.9 | 19.1 | 0.8 | $1.4 \times 10^{-4} *$ | $1.6 \times 10^{-7} \dagger$ |
| No. 190 | sF | 18.6 | 18.6 | 18.6 | 18.6 | 18.6 | | 18.6 | 0 | | |
| | wtRSV | 13.6 | 9.6 | 12.6 | 10.6 | 10.6 | | 11.4 | 1.6 | | |
| | VLP-90 | 7.6 | 9.6 | 12.6 | 10.6 | 7.6 | | 9.6 | 2.1 | $1.3 \times 10^{-5} *$ | 0.17 |
| No. 183 | sF | 17.6 | 17.6 | 17.6 | 17.6 | 17.6 | | 17.6 | 0 | | |
| | wtRSV | 13.6 | 14.6 | 13.6 | 15.6 | 15.6 | | 14.6 | 1.0 | | |
| | VLP-97 | 15.6 | 17.6 | 17.6 | 15.6 | 15.6 | | 16.4 | 1.1 | $4.0 \times 10^{-2} *$ | 0.027 \dagger |

^ALog2 endpoint dilution titers are listed for individual animals as well as for average (Avg.) and standard deviation (s.d.)

^BP value compared to the sF or wtRSV controls within each experiment calculated by Student's T Test. Significant difference ($p < 0.05$) is indicated by * and \dagger for sF and wtRSV controls, respectively.

Supplemental Table 2 | Full RSV Microneutralization Titers for Figure 9C

| Expt | Immunogen | Animal Number ^A | | | | | | Avg. ^A | s.d. ^A | P value ^B vs sF | P value ^B vs wtRSV |
|---------|-----------|----------------------------|-------|-------|------|-------|------|-------------------|-------------------|-------------------------------|----------------------------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | | | | |
| No. 194 | sF | 7.48 | 10.02 | 10.25 | 6.49 | 11.16 | | 9.1 | 2.0 | | |
| | wtRSV | 6.7 | 6.5 | 6.5 | 7.3 | 6.5 | | 6.7 | 0.4 | | |
| | VLP-19 | 3.3 | 3.3 | 5.26 | 8.09 | 9.33 | | 5.9 | 2.8 | 0.067 | 0.51 |
| | VLP-93 | 5.49 | 8.15 | 5.92 | 3.32 | 10.47 | | 6.7 | 2.7 | 0.15 | 0.98 |
| No. 185 | sF | 10.4 | 7.6 | 10.3 | 9.7 | 10.9 | 11.1 | 10.0 | 1.3 | | |
| | wtRSV | 4.9 | 4.9 | 6.3 | 4.9 | 6.5 | 4.9 | 5.4 | 0.8 | | |
| | VLP-75 | 3.3 | 3.3 | 5.8 | 3.3 | 7.7 | 4.9 | 4.7 | 1.8 | 1.6x10 ⁻⁴ * | 0.41 |
| No. 188 | sF | 8.1 | 8.1 | 8.7 | 8.1 | 8.1 | 10.1 | 8.5 | 0.8 | | |
| | wtRSV | 4.1 | 4.3 | 4.9 | 4.9 | 4.9 | 3.3 | 4.4 | 0.6 | | |
| | VLP-87 | 12.3 | 5.8 | 10.6 | 4.9 | 4.9 | 4.9 | 7.2 | 3.3 | 0.37 | 0.068 |
| No. 190 | sF | 10.41 | 10.9 | 12.8 | 10.2 | 10.3 | | 10.9 | 1.1 | | |
| | wtRSV | 4.9 | 3.3 | 3.3 | 4.9 | 4.9 | | 4.3 | 0.9 | | |
| | VLP-90 | 3.32 | 7.2 | 3.3 | 3.3 | 3.3 | | 4.1 | 1.7 | 7.2x10 ⁻⁵ * | 0.84 |
| No. 183 | sF | 9.7 | 11.4 | 11.4 | 12.8 | 8.1 | | 10.7 | 1.8 | | |
| | wtRSV | 4.9 | 6.5 | 4.9 | 4.7 | 4.8 | | 5.2 | 0.8 | | |
| | VLP-97 | 9.7 | 4.9 | 12.2 | 5.5 | 9.4 | | 8.3 | 3.1 | 0.18 | 0.055 |

^ALog2 endpoint dilution titers are listed for individual animals as well as for average (Avg.) and standard deviation (s.d.)

^BP value compared to the sF or wtRSV controls within each experiment calculated by Student's T Test. Significant difference ($p<0.05$) is indicated by * and † for sF and wtRSV controls, respectively.

Supplemental Table 3 | Full RSV Lung Titers for Figure 9D

| Expt | Immunogen | Animal Number ^A | | | | | | Avg. ^A | s.d. ^A | P value ^B vs sF | P value ^B vs wtRSV |
|---------|-----------|----------------------------|-----|-----|-----|-----|-----|-------------------|-------------------|-------------------------------|----------------------------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | | | | |
| No. 194 | sF | 1.3 | 1.1 | 1.2 | 1.3 | 1.2 | | 1.2 | 0.1 | | |
| | wtRSV | 1.1 | 1.2 | 1.0 | 0.9 | 1.1 | | 1.1 | 0.1 | | |
| | VLP-19 | 2.7 | 2.9 | 1 | 1.1 | 1 | | 1.7 | 1.0 | 0.27 | 0.16 |
| | VLP-93 | 1.1 | 1.6 | 1.8 | 2.4 | 1.1 | | 1.6 | 0.5 | 0.16 | 0.061 |
| No. 185 | sF | 1.2 | 1.1 | 1.1 | 1.1 | 1.2 | 1.3 | 1.2 | 0.1 | | |
| | wtRSV | 1.3 | 1.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 0.1 | | |
| | VLP-75 | 4.2 | 2 | 1.8 | 1.3 | 1.1 | 5.3 | 2.6 | 1.7 | 0.067 | 0.059 |
| No. 188 | sF | 1.1 | 1.1 | 1.1 | 1.1 | 1.2 | 1.2 | 1.1 | 0.1 | | |
| | wtRSV | 1.1 | 1.1 | 1.2 | 1.1 | 1.2 | 1.2 | 1.0 | 0.1 | | |
| | VLP-87 | 1.3 | 1.4 | 1.0 | 3.4 | 3.0 | 1.8 | 2.0 | 1.0 | 0.061 | 0.065 |
| No. 190 | sF | 0.8 | 0.9 | 0.9 | 0.9 | 1.0 | | 0.9 | 0.1 | | |
| | wtRSV | 1.0 | 0.8 | 2.6 | 0.8 | 1.0 | | 1.2 | 0.8 | | |
| | VLP-90 | 0.9 | 1.9 | 0.9 | 1.1 | 0.9 | | 1.1 | 0.4 | 0.26 | 0.81 |
| No. 183 | sF | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | | 1.1 | 0 | | |
| | wtRSV | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | | 1.1 | 0 | | |
| | VLP-97 | 2.7 | 2.4 | 3.1 | 2.7 | 1.1 | | 2.4 | 0.8 | 0.0054 * | 0.005 † |

^ALog10 endpoint dilution titers are listed for individual animals as well as for average (Avg.) and standard deviation (s.d.)

^BP value compared to the sF or wtRSV controls within each experiment calculated by Student's T Test. Significant difference ($p<0.05$) is indicated by * and † for sF and wtRSV controls, respectively.