

Supplementary materials

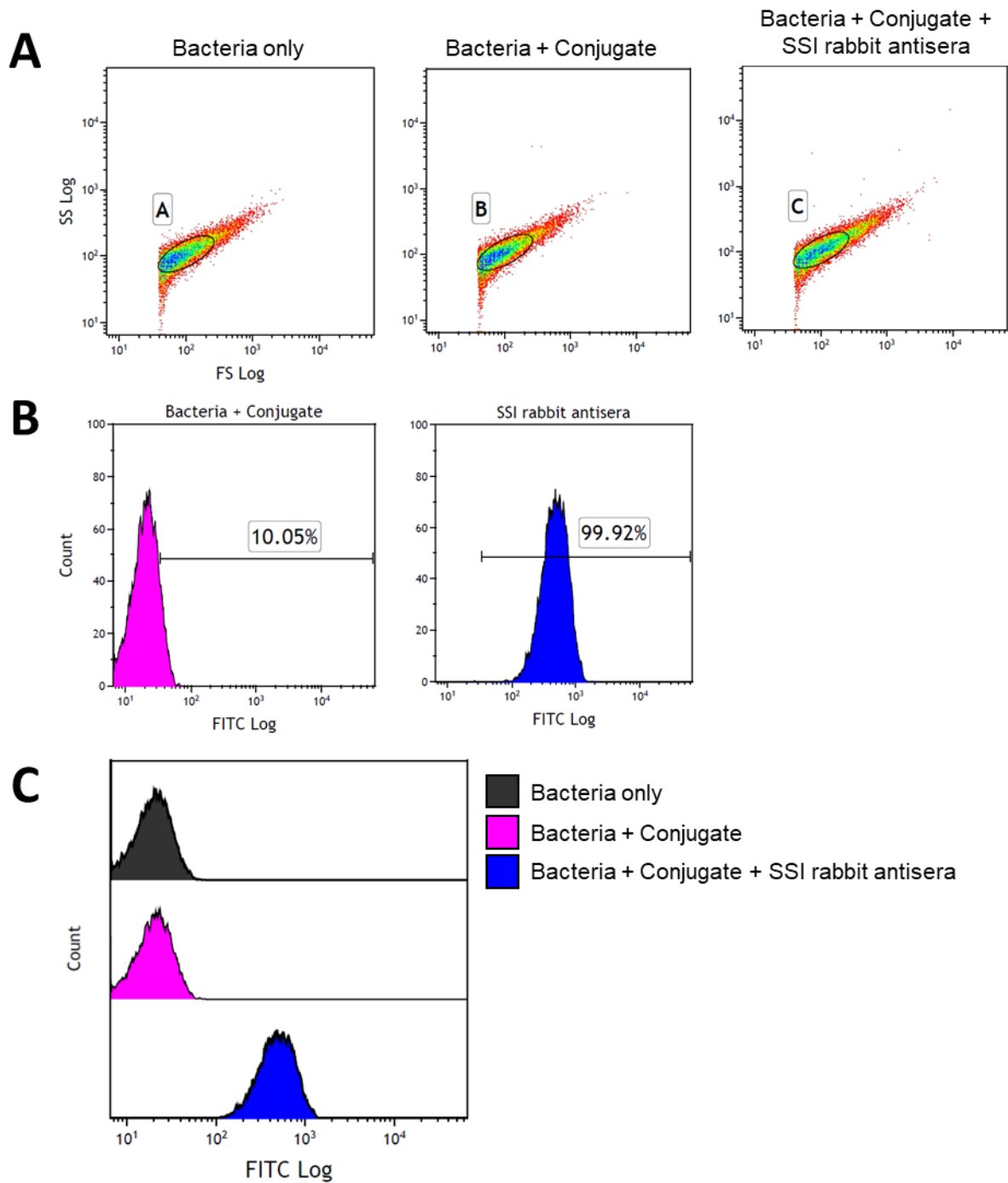


Figure S1. Binding of rabbit antisera to 49 GBS isolates by flow cytometry. (A) The main bacterial population was gated by forward scatter and side scatter. (B) Fluorescein isothiocyanate (FITC) histogram plot of negative control well (bacteria and conjugate) was used to setup gating strategy using a 10% lower limit. The same gate was applied to each isolate with SSI rabbit antisera. Mean fluorescence values for each isolate were multiplied by gated % of counts to obtain a mean fluorescence index (MFI) value. Each isolate was tested in duplicate: the mean and standard deviation were calculated. (C) Overlay plot of controls and test sample indicating fluorescence shift.

| Serotype | Strain identifier | Mean fluorescence index (n = 2) | | | | | Standard deviation | | | | |
|----------|--------------------------|---------------------------------|--------|--------|---------|--------|--------------------|--------|--------|---------|-------|
| | | SSI Ia | SSI Ib | SSI II | SSI III | SSI V | SSI Ia | SSI Ib | SSI II | SSI III | SSI V |
| Ia | PHE 1 | 59520 | 20949 | 176 | 1393 | 2075 | 8495 | 696 | 52 | 68 | 22 |
| | PHE 2 | 54280 | 41746 | 122 | 2616 | 4083 | 4548 | 611 | 84 | 20 | 109 |
| | PHE 3 | NT # | NT # | NT # | NT # | NT # | - | - | - | - | - |
| | PHE 4 | NT # | NT # | NT # | NT # | NT # | - | - | - | - | - |
| | PHE 5 | 55003 | 22063 | 93 | 2077 | 5249 | 9852 | 1239 | 79 | 0 | 158 |
| | PHE 6 | 72793 | 11237 | 211 | 709 | 402 | 5602 | 216 | 27 | 114 | 44 |
| | PHE 7 ★ | 59330 | 25826 | 119 | 1783 | 1242 | 5190 | 116 | 100 | 37 | 60 |
| | 515 | 58045 | 15782 | 76 | 857 | 2628 | 12250 | 730 | 109 | 60 | 158 |
| | NCTC 9993 (O90R) | NT * | NT * | NT * | NT * | NT * | - | - | - | - | - |
| | NCTC 11078 (A909) | 43374 | 39205 | 940 | 3937 | 261 | 5396 | 90 | 48 | 627 | 131 |
| Ib | NCTC 12906 (335) | 38050 | 16829 | -557 | 851 | 3524 | 84 | 37 | 580 | 3 | 192 |
| | PHE 8 | NT # | NT # | NT # | NT # | NT # | - | - | - | - | - |
| | PHE 9 ★ | 74552 | 159318 | 306 | 2483 | 13594 | 3554 | 18012 | 202 | 245 | 5928 |
| | PHE 10 | 7460 | 9506 | 92 | 5431 | 3959 | 1092 | 1887 | 2 | 2145 | 921 |
| | PHE 11 | NT + | NT + | NT + | NT + | NT + | - | - | - | - | - |
| | PHE 12 | 25827 | 170360 | 116 | 2205 | 7809 | 5282 | 23807 | 162 | 118 | 1070 |
| | PHE 13 | 33784 | 155255 | 586 | 5246 | 9704 | 3162 | 9818 | 418 | 1321 | 837 |
| | PHE 14 | 22108 | 160605 | 373 | 1326 | 6636 | 4063 | 72738 | 155 | 783 | 114 |
| | H36B | 12496 | 61882 | 152 | 1907 | 704 | 232 | 5674 | 72 | 1176 | 171 |
| | Reference NCTC 8187 | 15118 | 107760 | 148 | 1344 | 11627 | 4763 | 17124 | 180 | 609 | 1076 |
| II | NCTC 8180 (S102) | NT + | NT + | NT + | NT + | NT + | - | - | - | - | - |
| | PHE 15 | 10237 | 16004 | 40560 | 1388 | 910 | 1566 | 582 | 7135 | 4 | 92 |
| | PHE 16 | NT + | NT + | NT + | NT + | NT + | - | - | - | - | - |
| | PHE 17 | 7075 | 31 | 12484 | 5598 | 57 | 888 | 48 | 2466 | 574 | 94 |
| | PHE 18 | NT * | NT * | NT * | NT * | NT * | - | - | - | - | - |
| | PHE 19 ★ | 14199 | 178 | 27948 | 22809 | 910 | 561 | 193 | 6622 | 4359 | 466 |
| | PHE 20 | 14947 | 15528 | 18485 | 3243 | 9360 | 461 | 740 | 1366 | 306 | 141 |
| | PHE 21 | 13165 | 386 | 18671 | 18933 | 545 | 183 | 409 | 916 | 498 | 77 |
| | NCTC 11079 (18RS21) | NT + | NT + | NT + | NT + | NT + | - | - | - | - | - |
| | NCTC 8183 (S84) | NT + | NT + | NT + | NT + | NT + | - | - | - | - | - |
| III | PHE 22 ★ | 8629 | 60 | -130 | 90338 | 851 | 3349 | 163 | 1 | 41735 | 55 |
| | PHE 23 | 8878 | 118 | -6 | 77455 | 685 | 778 | 106 | 8 | 38820 | 539 |
| | PHE 24 | NT + | NT + | NT + | NT + | NT + | - | - | - | - | - |
| | PHE 25 | NT + | NT + | NT + | NT + | NT + | - | - | - | - | - |
| | PHE 26 | 8888 | 94 | 14 | 111007 | 427 | 878 | 11 | 10 | 53649 | 79 |
| | PHE 27 | NT + | NT + | NT + | NT + | NT + | - | - | - | - | - |
| | PHE 28 | NT + | NT + | NT + | NT + | NT + | - | - | - | - | - |
| | COH-1 | NT # | NT # | NT # | NT # | NT # | - | - | - | - | - |
| | NCTC 11080 (M216) | 10584 | 880 | 63 | 65630 | 541 | 1744 | 51 | 34 | 9145 | 189 |
| | NCTC 8184 (S122) | NT + | NT + | NT + | NT + | NT + | - | - | - | - | - |
| V | PHE 29 | 22248 | 23456 | 180 | 1552 | 119539 | 1929 | 7737 | 48 | 3 | 18219 |
| | PHE 30 ★ | 9592 | 361 | 79 | 6944 | 22089 | 2976 | 240 | 52 | 286 | 6873 |
| | PHE 31 | NT + | NT + | NT + | NT + | NT + | - | - | - | - | - |
| | PHE 32 | 13284 | 881 | 23 | 9170 | 46516 | 309 | 713 | 5 | 2111 | 45167 |
| | PHE 33 | 16128 | 19635 | 134 | 2431 | 166674 | 2273 | 986 | 64 | 221 | 3540 |
| | PHE 34 | NT # | NT # | NT # | NT # | NT # | - | - | - | - | - |
| | PHE 35 | NT + | NT + | NT + | NT + | NT + | - | - | - | - | - |
| | CJB111 | NT # | NT # | NT # | NT # | NT # | - | - | - | - | - |
| | NCTC 13946 (Prague 1984) | NT + | NT + | NT + | NT + | NT + | - | - | - | - | - |

Table S1. Mean fluorescence index values (n=2) and standard deviation of serotype-specific IgG to GBS isolate using rabbit antisera. Several isolates were excluded from further testing (not tested; NT) as denoted by NT # (no protein mAb binding), NT + (sensitive to complement and dHL60 and NT * (extreme OPKA outlier). The isolate selected to represent each serotype (★) was accessioned at National Collection of Type Cultures (NCTC).