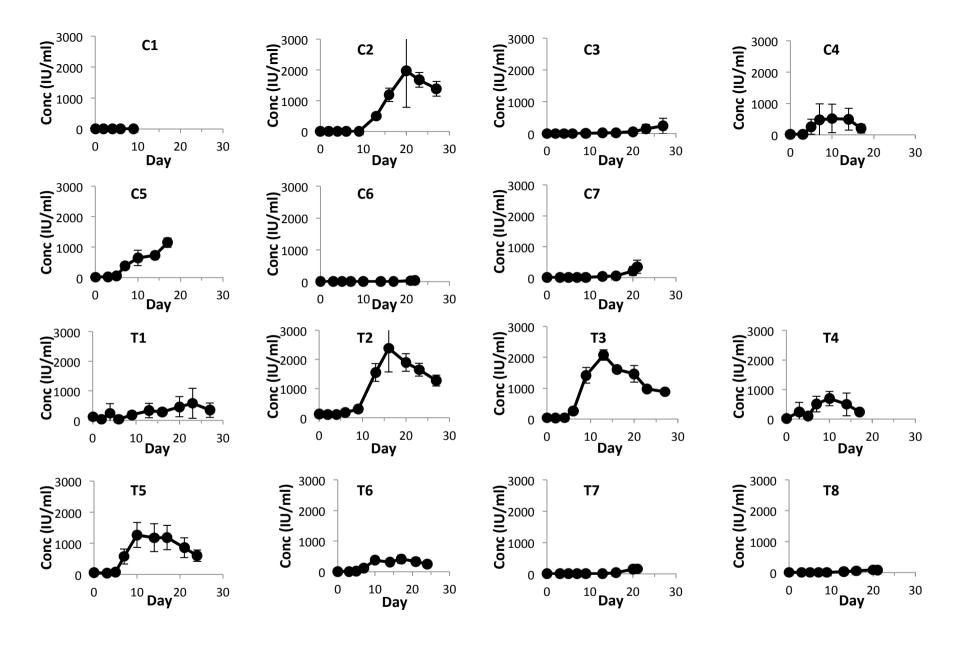
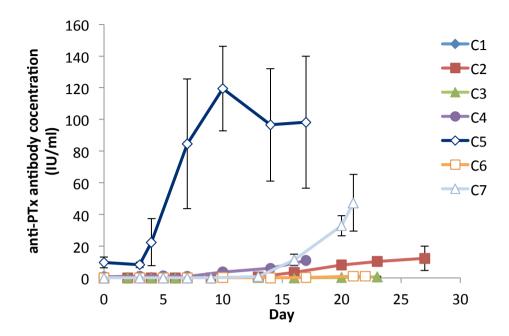
## Supplementary Table 1. Details of WBC, colonization, and ELISA tests for each baboon.

Baboon	Active B. br infection	Day 0 Day 2		2/3		Day 9/10		
		anti-Fha titer (IU/ml)	WBC (×1000/μl)	CFU/ml	anti-Fha titer (IU/ml)	anti- Bp LOS titer (raw abs)	anti-PTx titer (IU/ml)	response to pertussis infection
Sigma	n/a	90 ± 12	n/a	n/a	n/a	n/a	n/a	n/a
C1	-	3 ± 1	18.41	8.0 × 10 <sup>7</sup>	3 ± 2	0.06 ± 0.01	0.03 ± 0.02	typical
C2	yes	3.4 ± 0.5	19.26	$3.5 \times 10^{7}$	3.1 ± 0.5	0.08 ± 0.01	0.02 ± 0.01	excluded
C3	yes	0.54 ± 0.09	5.11	$1.8 \times 10^{7}$	1.7 ± 0.8	0.09 ± 0.01	0.3 ± 0.3	excluded
C4	yes*	14 ± 6	12.61	$1.0 \times 10^{3}$	518 ± 456	0.41 ± 0.02	4 ± 2	excluded
<b>C</b> 5	-	20 ± 2	6.65	5	647 ± 254	0.39 ± 0.01	119 ± 27	atypical
C6	-	0 ± 0	33.58	$3.0 \times 10^{7}$	0.7 ± 0.2	0.06 ± 0.01	0.16 ± 0.04	typical
C7	-	0.6 ± 0.3	27.56	$1.8 \times 10^{7}$	1.1 ± 0.6	0.06 ± 0.01	0.01 ± 0.01	typical
T1	-	119 ± 36	7.96	6.5 × 10 <sup>4</sup>	185 ± 117	0.22 ± 0.04	nd	atypical
T2	-	135 ± 37	6.85	$3.0 \times 10^{4}$	301 ± 41	0.40 ± 0.08	nd	atypical
Т3	-	39 ± 2	6.33	1.0 × 10 <sup>4</sup>	1416 ± 254	0.54 ± 0.02	nd	atypical
T4	-	22 ± 10	8.36	$6.0 \times 10^{3}$	690 ± 239	0.38 ± 0.04	nd	atypical
T5	yes	52 ± 16	28.38	$1.5 \times 10^{3}$	1269 ± 406	0.27 ± 0.07	nd	excluded
Т6	-	5 ± 2	23.03	1.7 × 10 <sup>4</sup>	378 ± 113	0.21 ± 0.04	nd	atypical
T7	-	0.8 ± 0.3	30.31	$3.8 \times 10^{7}$	1.2 ± 0.4	0.07 ± 0.01	nd	typical
T8	-	0.2 ± 0.1	14.24	1.3 × 10 <sup>8</sup>	5 ± 2	0.09 ± 0.02	nd	typical

B. br = B. br confirmed by standard microbiological procedures; nd = not applicable; nd = not applicable; nd = not and nd = not applicable; nd = n



**Supplementary Figure 1. Anti-Fha antibody titer as measured by ELISA.** Baboon serum samples were analyzed on the day indicated in duplicate with 8 x 5-fold dilutions. Each plate contained a control antibody or serum that had been normalized relative to the WHO 06/142 reference serum. Fits of the serum data were compared to the control to determine anti-Fha antibody concentrations in IU/ml.



**Supplementary Figure 2. Anti-PTx antibody titer as measured by ELISA.** Baboon serum samples were analyzed on the day indicated in duplicate with 8 x 5-fold dilutions. Each plate contained a control antibody that had been normalized relative to the WHO 06/142 reference serum. Fits of the serum data were compared to the control to determine anti-PTx antibody concentrations in IU/ml.