

S4 Table. OspC-encoding plasmids are retained at 21 days post-infection in Experiment 1^a.

Strain		Spirochetal burden (Bacteria/100ng DNA) ^b								
		Inoculation Site			Tibiotarsus			Heart		
		Plasmid ^c	Chrom ^d	Plasmid /Chrom ^e	Plasmid	Chrom	Plasmid /Chrom	Plasmid	Chrom	Plasmid /Chrom
B31-A3/Vector		171.6 ±5.1	177.6 ±5.1	0.96	658.7 ±8.5	794.9 ±11.6	0.82	95.5 ±2.2	114.9± 7.7	0.83
B31-A3ΔospC	Vector	1.3 ±1.5	2.3 ±2.4	N.A. ^f	3.2 ±2.1	3.7 ±2.6	N.A.	3.5 ±2.1	2.0 ±1.9	N.A.
	pOspC _{B31}	69.2 ±4.8	85.3 ±12.7	0.81	519.4 ±8.0	648.2 ±4.0	0.80	112.2 ±4.8	135.5± 2.3	0.82
	pOspC _{N40-D10/E9}	60.4 ±5.1	61.2 ±7.6	0.98	185.6 ±6.5	173.7 ±7.1	1.06	208.1 ±5.6	256.7± 2.0	0.81
	pOspC _{PBr}	67.2 ±8.2	67.6 ±9.9	0.99	4.5 ±2.7	10.0 ±3.7	N.A.	63.5 ±4.5	64.4 ±6.4	0.98
	pOspC _{B31-ECM⁻}	1.4 ±1.6	2.3 ±2.8	N.A.	1.3 ±1.9	2.5 ±2.6	N.A.	2.6 ±2.3	3.8 ±2.9	N.A.

^a Experiment displayed in Figure 5.

^b Spirochetal burden determined by qPCR; shown are geometric mean ± geometric standard deviation from 10 mice.

^c Spirochetal burden determined using *coIE1* primers.

^d Spirochetal burden determined using *recA* primers.

^e Ratio of burden determined using *coIE1* primers to burden determined using *recA* primers.

^f NA, not applicable because the burdens obtained using either *recA* primers, *coIE1* primers, or both were below the detection limit of 10 bacterial copies per 100ng DNA.