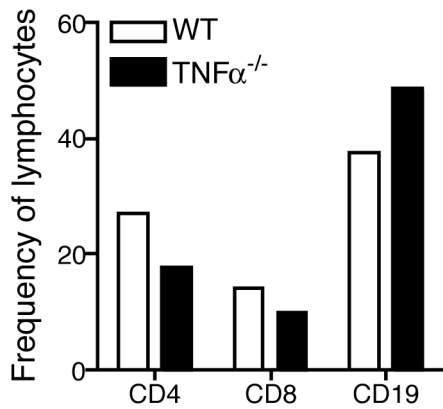


Supplemental Table 1. Gene expression changes in lymph nodes induced after four-day infection or immunization with *B. burgdorferi*.

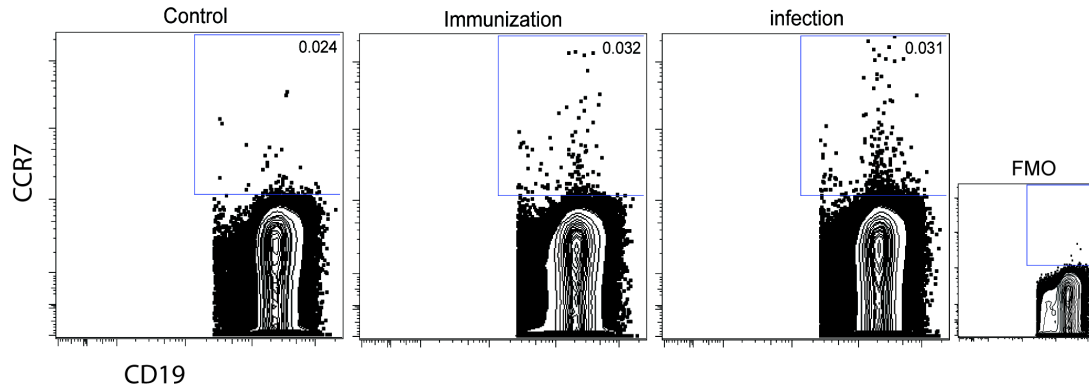
Gene ^a	Infected ^b	Immunized ^b	FD ^c
Cxcl13	122	66	1.8
Cxcl12	61	31	1.9
Cxcr2	32	6.3	5.1
Xcl1	30	18	1.6
Cxcl10	25	16	1.5
Tnfrsf1a	16	6	2.7
Tnfsf14	12	10	1.2
Cmtm4	8.0	3.6	2.2
Ccl20	4.0	-2.0	7.9
IL4	-4.0	1.5	-6.0
Ccbp2	-7.7	-3.3	-2.3
Ccl2	-16	-1.2	-13
Cmtm6	-65	-2.1	-31

^a Genes > 4-fold changed after infection compared to non-manipulated lymph nodes. In bold those that were tested by qRT-PCR. Only one, IL-4, was confirmed to be expressed significantly higher in immunized compared to infected mice (see Fig. 3). Other genes tested: *Aplnr*, *Bdnf*, *Cxcr5*, *Bmp10*, *Bmp15*, *Bmp6*, *Ccbp2*, *Ccl1*, *Ccl11*, *Ccl12*, *Ccl17*, *Ccl19*, *Ccl2*, *Ccl20*, *Ccl4*, *Ccl5*, *Ccl6*, *Ccl7*, *Ccl8*, *Ccl9*, *Ccr1*, *Ccr11*, *Ccr2*, *Ccr3*, *Ccr4*, *Ccr6*, *Ccr7*, *Ccr8*, *Ccr9*, *Ccr11*, *Ccr12*, *Cmtm2a*, *Cmtm3*, *Cmtm4*, *Cmtm5*, *Cmtm6*, *Cmklr1*, *Cxcr7*, *Csf1*, *Csf2*, *Cx3cl1*, *Cx3cr1*, *Cxcl1*, *Cxcl10*, *Cxcl11*, *Cxcl12*, *Cxcl13*, *Cxcl15*, *Cxcl2*, *Pf4*, *Cxcl5*, *Ppbp*, *Cxcl9*, *Cxcr3*, *Cxcr4*, *Cxcr6*, *Tymp*, *Gdf5*, *Ccr10*, *Gpr81*, *Hif1a*, *Il13*, *Il16*, *Il18*, *Il1a*, *Il4*, *Cxcr1*, *Cxcr2*, *Inha*, *Inhbb*, *Lif*, *Ltb4r2*, *Mmp2*, *Myd88*, *Nfkb1*, *Rgs3*, *Slit2*, *Tlr4*, *Tnf*, *Tnfrsf1a*, *Tnfsf14*, *Trem1*, *Xcl1*. Housekeeping genes: *Gusb*, *Hprt*, *Hsp90ab1*, *Gapdh*, *Actb*

^b Fold-difference in lymph node gene expression compared to non-manipulated lymph node



Supplemental Figure 1: Lack of TNF- α does not reduce B cell accumulation in draining lymph nodes after infection with *B. burgdorferi*. Shown are mean frequencies of indicated cell types in draining right inguinal lymph nodes of wildtype (WT, open bars) and TNF- α -/- mice (n = 2) infected with host-adapted *B. burgdorferi* 10 days prior to analysis. TNF- α was not required for strong B cell accumulation.



Supplemental Figure 2: Small numbers CCR7+ B cells are induced by infection with *B. burgdorferi*. Shown are representative samples of draining lymph nodes (n = 3) from non-infected wildtype control mice, mice immunized 6-days prior with *B. burgdorferi* lysate in CFA or infected with host-adapted *B. burgdorferi* spirochetes analyzed by multicolor flow cytometry and gated on live, CD3, 4, 8, F4/80 negative CD19+ cells. Frequencies indicate the number of CCR7+ B cells. FMO, fluorescent minus one control stain lacking CCR7 antibodies.