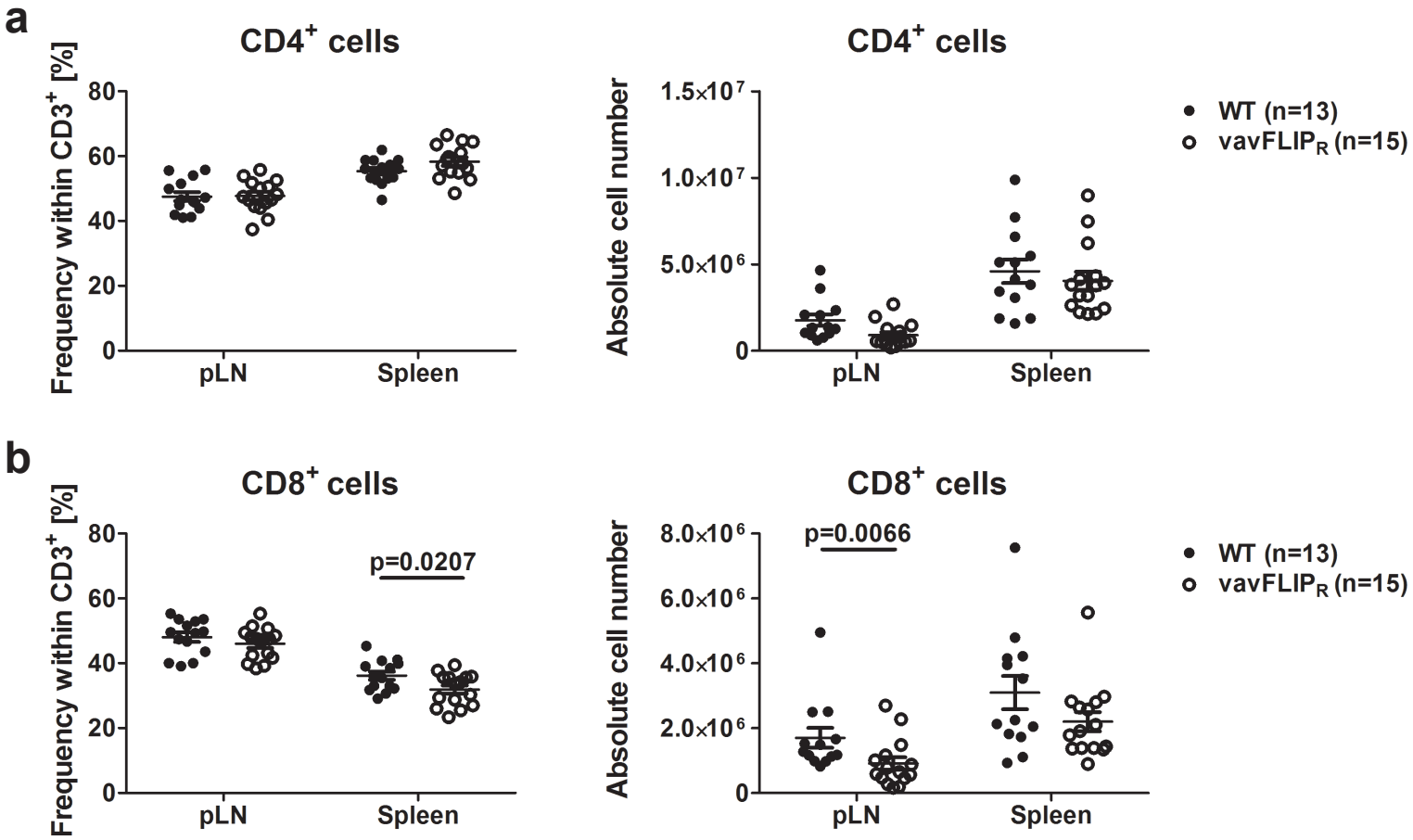
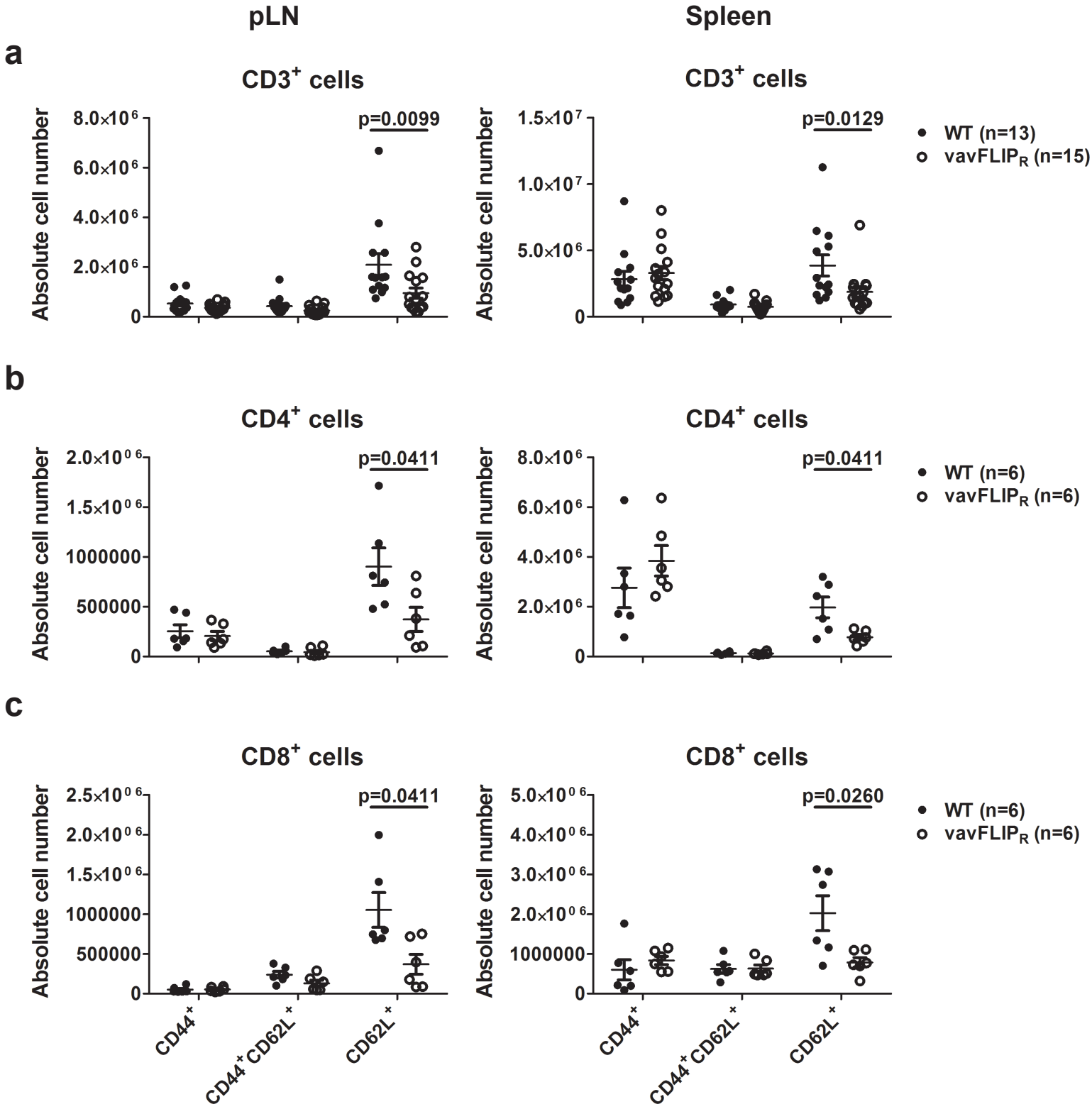
Supplementary table 1. Frequencies of $CD11c^+$, $F4/80^+$, $Gr1^+$ (WT n=4, $vavFLIP_R$ n=6) and $CD49b^+$ (WT: n=2, $vavFLIP_R$: n=4) cells within the $CD3^-CD19^-$ compartment in spleen and bone marrow (BM) from one-year-old mice.

Mouse strain	Organ	Frequency within $CD3^-$ $CD19^-$ subset (± SD) [%]			
		$CD11c^+$	$CD49b^+$	$F4/80^+$	$Gr1^+$
WT	**spleen**	3.2 (2.7)	12.9 (2.8)	8.5 (7.4)	2.7 (1.7)
$vavFLIP_R$	**spleen**	3.8 (3.4)	12.0 (3.9)	8.5 (7.3)	5.0 (3.1)
WT	**BM**	0.8 (0.2)	4.8 (1.6)	16.1 (7.5)	51.1 (8.5)
$vavFLIP_R$	**BM**	0.9 (0.5)	6.9 (2.5)	19.8 (14.8)	55.7 (21.2)

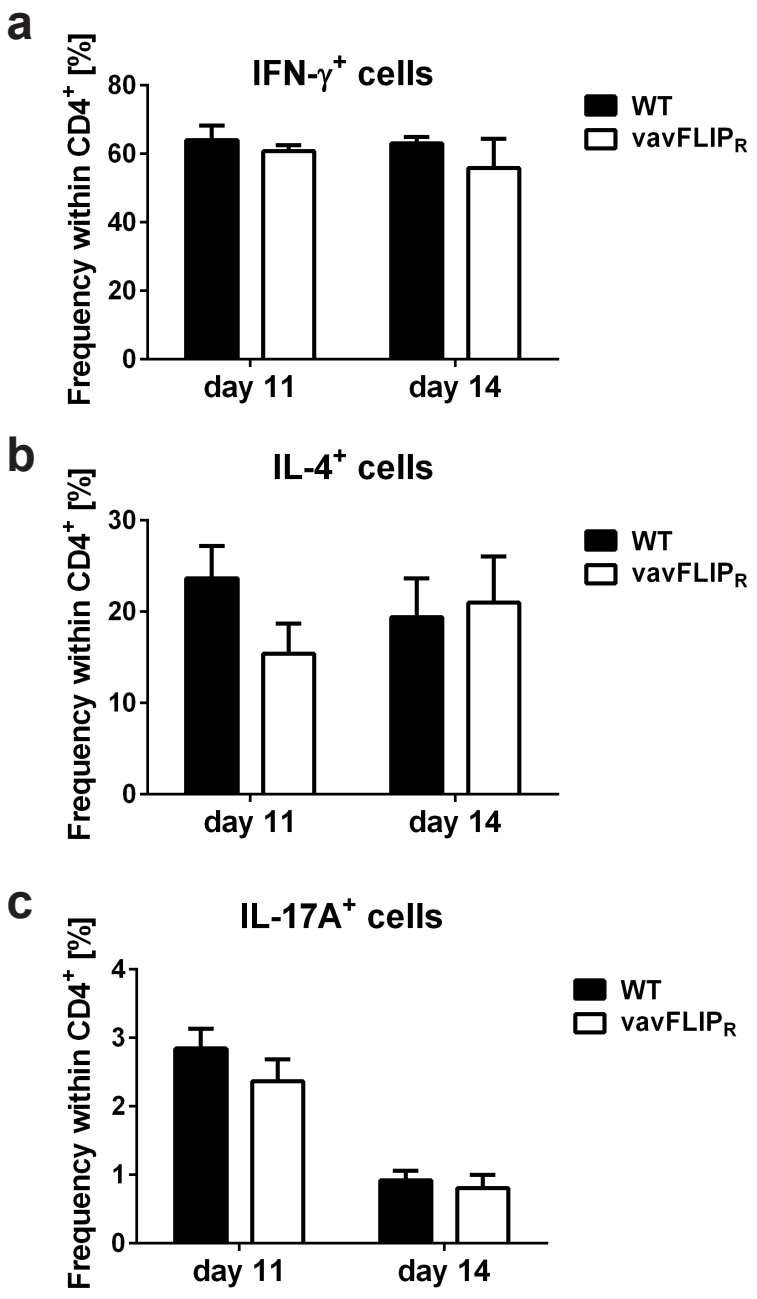
(SD = standard deviation)


a
CD4+ cells
Frequency within CD3+ [%]
80
60
40
20
0
pLN
Spleen
CD4+ cells
Absolute cell number
1.5×10^7
1.0×10^7
5.0×10^6
0
pLN
Spleen
WT (n=13)
vavFLIPR (n=15)
b
CD8+ cells
Frequency within CD3+ [%]
p=0.0207
80
60
40
20
0
pLN
Spleen
CD8+ cells
Absolute cell number
p=0.0066
8.0×10^6
6.0×10^6
4.0×10^6
2.0×10^6
0
pLN
Spleen
WT (n=13)
vavFLIPR (n=15)

Supplementary figure 1. Analysis of lymphocyte populations in 12-14 months old WT and vavFLIP$_R$ mice. Frequency and absolute cell number of CD4$^+$ cells (**a**) and CD8$^+$ cells (**b**) in freshly isolated peripheral lymph nodes (pLN) and spleen from WT (n=13) and vavFLIP$_R$ (n=15) littermates. Individual mice are represented as separate symbols. Horizontal lines show the mean pooled from five independent experiments; error bars display the SEM. Statistical analyses were performed with two-tailed nonparametric Mann-Whitney *U* tests.


pLN
Spleen
a
CD3+ cells
Absolute cell number
8.0×10^6
6.0×10^6
4.0×10^6
2.0×10^6
0
p=0.0099
1.5×10^7
1.0×10^7
5.0×10^6
p=0.0129
WT (n=13)
vavFLIPR (n=15)
b
CD4+ cells
2.0×10^06
1.5×10^06
1000000
500000
p=0.0411
8.0×10^6
6.0×10^6
4.0×10^6
2.0×10^6
WT (n=6)
vavFLIPR (n=6)
c
CD8+ cells
2.5×10^06
2.0×10^06
1.5×10^06
p=0.0411
5.0×10^06
4.0×10^06
3.0×10^06
2.0×10^06
1000000
p=0.0260
CD44+
CD44+CD62L+
CD62L+

Supplementary figure 2. T cell activation status in pLN and spleen from mice at 12-14 months of age. Absolute cell numbers of $CD44^+$, $CD44^+CD62L^+$ and $CD62L^+$ cells within $CD3^+$ cells (**a**), $CD4^+$ cells (**b**) and $CD8^+$ cells (**c**) from peripheral lymph nodes (left panel) and spleen (right panel). Symbols represent individual WT (a: n=13, b-c: n=6) and $vavFLIP_R$ (a: n=15, b-c: n=6) mice. Horizontal lines display (**a**) the mean pooled from five independent experiments ± SEM, (**b-c**) the mean of one experiment representative for two independent experiments ± SEM. Statistical analyses were performed with two-tailed nonparametric Mann-Whitney *U* tests.


a
IFN-γ+ cells
Frequency within CD4+ [%]
80
60
40
20
0
day 11
day 14
WT
vavFLIPR
b
IL-4+ cells
Frequency within CD4+ [%]
30
20
10
0
day 11
day 14
WT
vavFLIPR
c
IL-17A+ cells
Frequency within CD4+ [%]
4
3
2
1
0
day 11
day 14
WT
vavFLIPR

Supplementary figure 3. Anti-CD3/anti-CD28 restimulation of peripheral lymph node cells from MOG-immunised WT and vavFLIP$_R$ mice. WT and vavFLIP$_R$ animals were injected with the MOG$_{35-55}$-peptide in complete Freund's adjuvant. Peripheral lymph node cells isolated on day 11 (WT n=4, vavFLIP$_R$ n=4) and day 14 (WT n=5, vavFLIP$_R$ n=3) after immunisation were restimulated with anti-CD3 and anti-CD28 (both 2 μg/ml) for 24 h, followed by flow cytometry analysis of IFN-γ, IL-17A and IL-4 producing T cells.