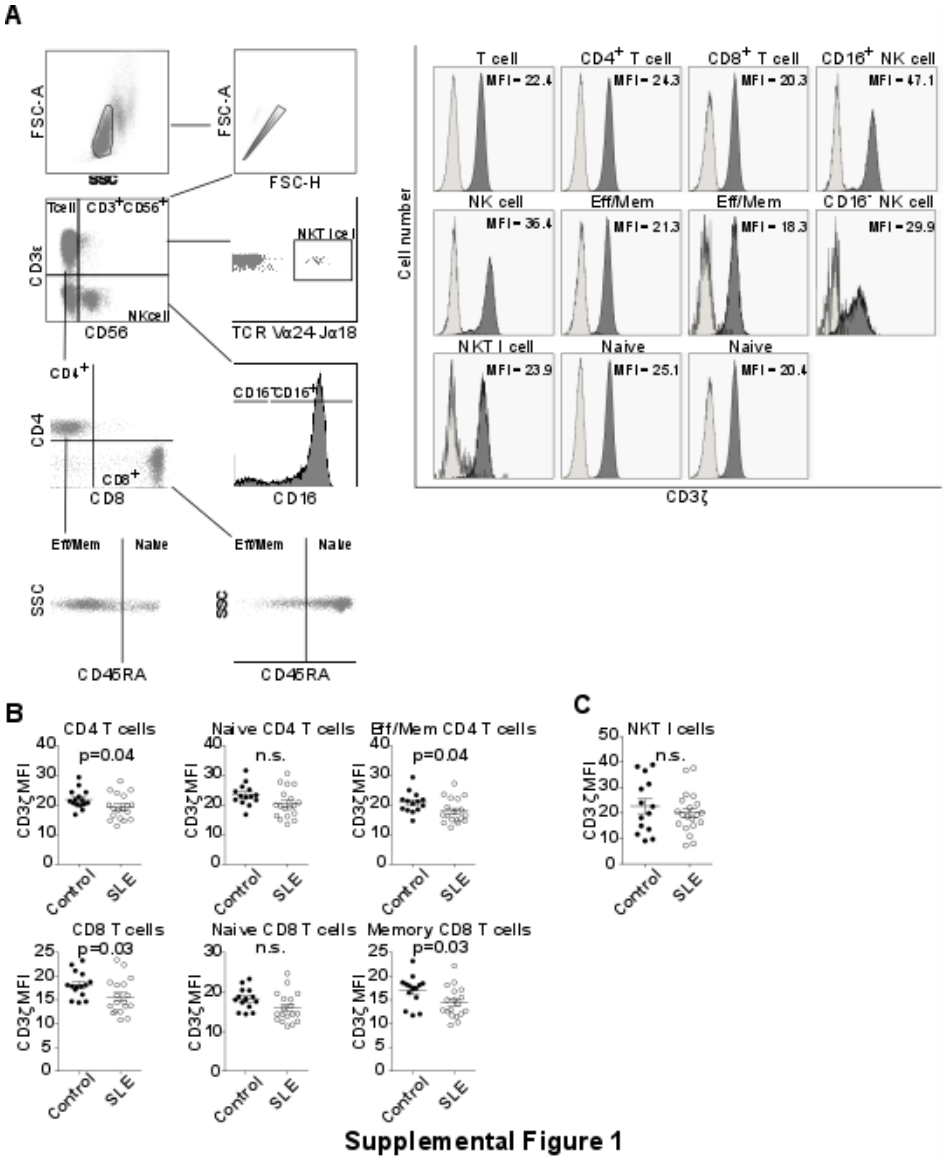
Supplemental Table 1: Antibody list.

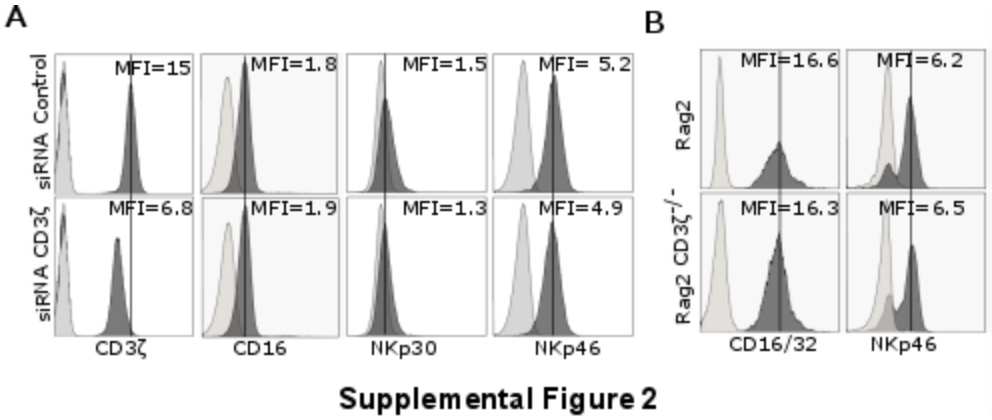
Antibody	Format	Clone	Company
CD3ζ	FITC	6B10.2	Biolegend
CD49b	FITC	DX5	Biolegend
CD3ζ	PE	6B10.2	Biolegend
IFNγ	PE	4S.B3	Biolegend
IFNγ	PE	XMG1.2	Biolegend
TCR Vα24-Jα18 (iNKT cell)	PE	6B11	Biolegend
CD4	PerCP	GK1.5	Biolegend
CD45RA	Pe-Cy7	HI100	Biolegend
TNF	Pe-Cy7	MAb11	Biolegend
CD8	APC	HIT8a	Biolegend
TNF	APC	MP6-XT22	Biolegend
CD107a	APC	H4A3	Biolegend
CD107a	APC	1D4B	Biolegend
CD16	APC	93	Biolegend
CD16	Alexa Fluor 700	3G8	Biolegend
CD3ε	APC-Cy7	HIT3a	Biolegend
CD56	Pacific Blue	NCAM	Biolegend
NKp30	PE	P30-15	Biolegend
NKp46	APC	29A1.4	Biolegend
NKp46	APC	9E2	Biolegend
APC Rat IgG2a, κ Isotype Ctrl	APC	RTK2758	Biolegend
Mouse IgG1, κ Isotype Ctrl	FITC, PE, APC or unlabeled	MOPC-21	Biolegend
Goat anti-mouse crosslinker			EMD Millipore



Supplemental Figure 1

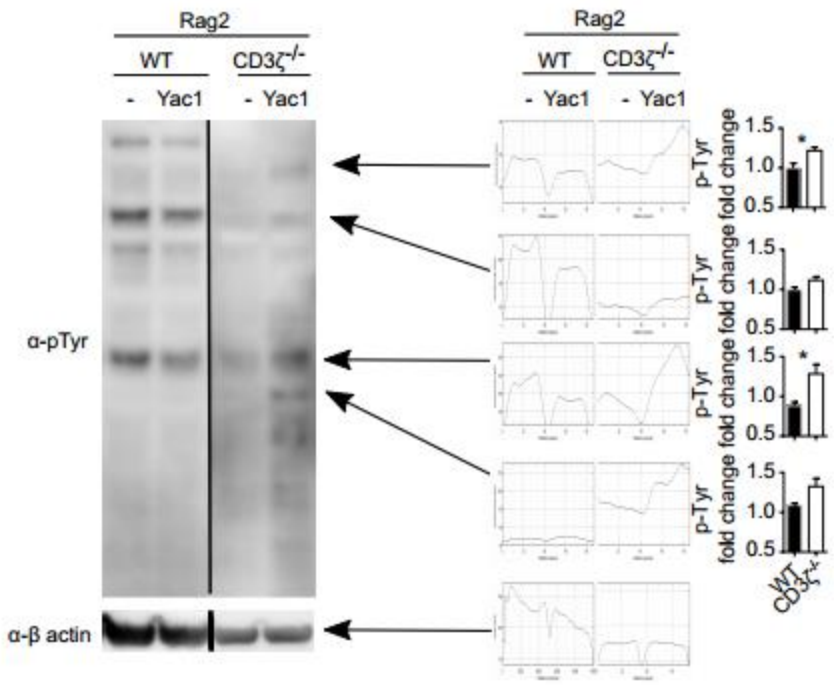
Supplemental Figure 1: Gating strategy and CD3ζ levels in T cell subsets.

(A, left) Representative dot plots and histograms showing the gating strategy for the different cell population including isotype control for anti-CD3ζ in lighter grey. (A, right) Representative histogram showing MFI in the different cells previously gated. (B) Scatter diagrams showing individual MFI values from different T cell subsets from control and SLE patients. (C) Scatter diagram showing individual MFI values from different NKT type I cell from control and SLE patients.



Supplemental Figure 2: CD16, NKp30 and NKp46 levels are not affected by CD3ζ levels.

(A)Representative histograms showing expression levels of CD3ζ, CD16, NKp30 and NKp46 (dark grey) from NKL cells electroporated with CD3ζ siRNA or control siRNA including isotype control (light grey). (B) Representative histograms showing CD16/32 and NKp46 levels (dark grey) in NK cells from *Rag*2 knockout or *Rag*2 knockout CD3ζ$^{-/-}$ including isotype controls (light grey).



Supplemental Figure 3

Supplemental Figure 3: Deletion of CD3ζ alters natural cytotoxicity in murine NK cells.

Interleukin-2 activated Natural Killer cells from Rag2 or Rag2 CD3$\zeta^{-/-}$ mice were activated with Yac-1 cells for one minute. A representative Western blot (out of 3) is shown for phospho-tyrosine and β-actin, and band density profile is shown on the center. Data were normalized (fold change over the unstimulated condition) and cumulative data for each quantified band are shown on the left. T-test was used to evaluate differences. *$p < 0.05$