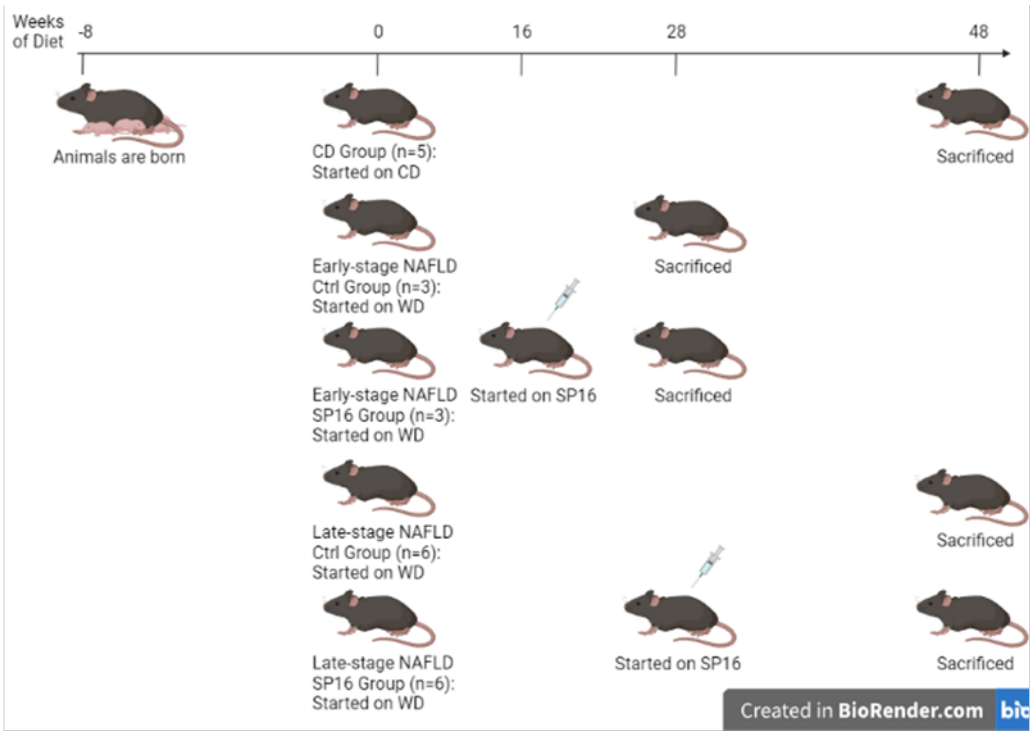


Figure S1. DIAMOND mice treatment groups. Our study consists of an early-stage NAFLD and late-stage NAFLD treatment groups and a CD group. The CD group consists of five male DIAMOND mice that were started on a CD at eight weeks of age and were continued on a CD until time of sacrifice. The early-stage NAFLD ctrl group consists of three male DIAMOND mice that were started on a WD at eight weeks of age and were continued on a WD until time of sacrifice. The early-stage NAFLD SP16 group consists of three male DIAMOND mice that were started on a WD at eight weeks of age and then were started on treatment with SP16 after being on a WD for 16 weeks and were continued on SP16 treatment and WD until time of sacrifice. The late-stage NAFLD ctrl group consists of six male DIAMOND mice that were started on a WD at eight weeks of age and were continued on a WD until time of sacrifice. The late-stage NAFLD SP16 group consists of six male DIAMOND mice that were started on a WD at eight weeks of age and then were started on treatment with SP16 after being on a WD for 28 weeks and were continued on SP16 treatment and WD until time of sacrifice.

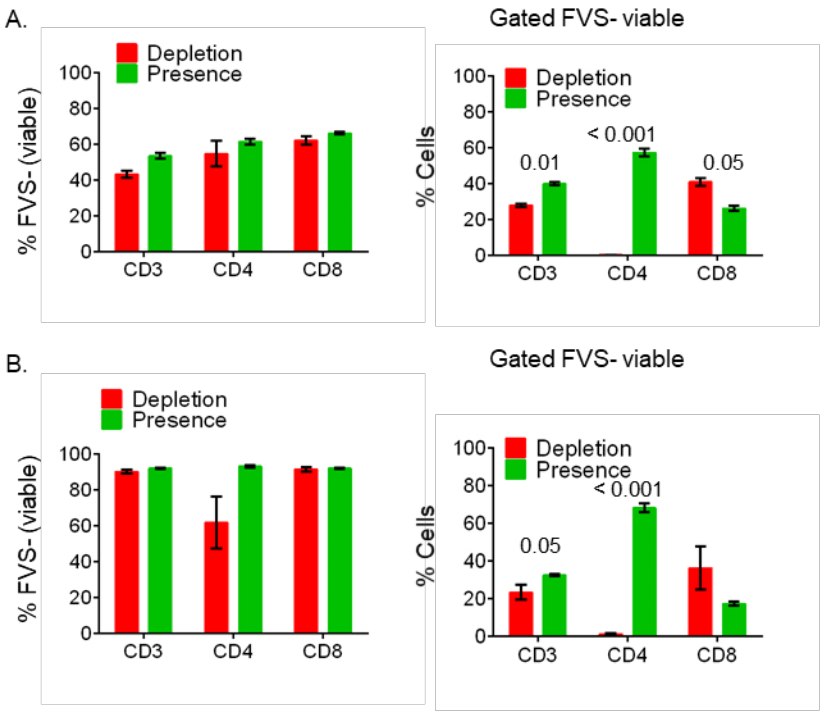


Figure S2. Hepatic and systemic effect of CD4 depletion on T cells, *in vivo*. Male DIAMOND mice were started on a WD at two months of age (Ctrl n=6, SP16 n=6). SP16 treatment was started after being on a WD for 28 weeks, WD was continued throughout course. Animals were sacrificed after being on a WD for 48 weeks. Livers and spleens were collected and subjected to flow cytometry analysis. Animals on a WD were grouped regardless of treatment (Depletion n=4 or 3, Presence n=8 or 9). Hepatic CD3+ T cells and CD4+CD3+ and CD8+CD3+ T cells were gated for FVS- viability. FVS- viable cells were gated for percentage of CD3+ or CD3+CD8+ or CD3+CD4+ T cells (A). Spleens were subjected to the same analysis as A (B). Error bars are SEM.

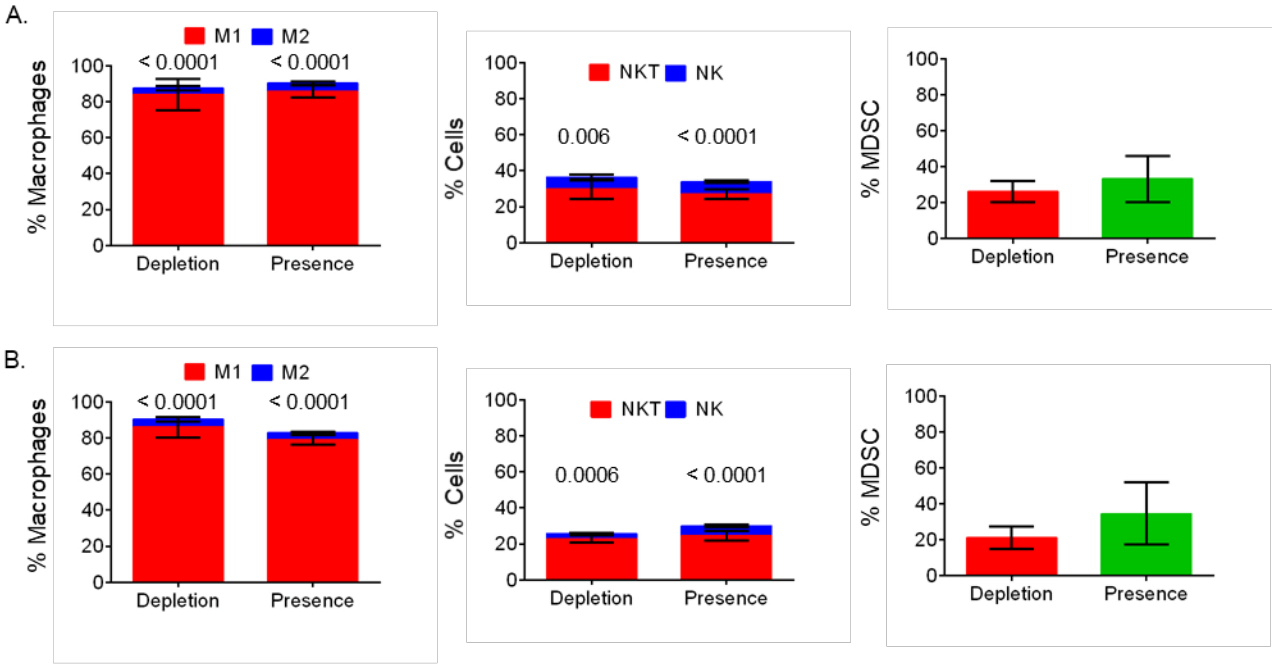
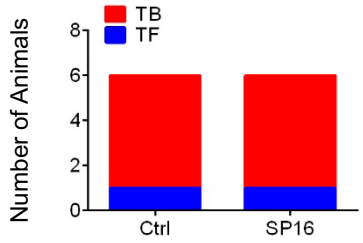
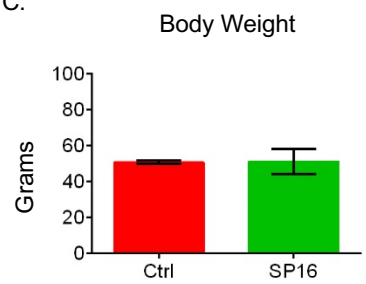


Figure S3. Hepatic and systemic immunological effect of CD4 depletion, *in vivo*. Male DIAMOND mice were started on a WD at two months of age (Ctrl n=6, SP16 n=6). SP16 treatment was started after being on a WD for 28 weeks, WD was continued throughout course. Animals were sacrificed after being on a WD for 48 weeks. Livers and spleens were collected and subjected to flow cytometry analysis. Animals on a WD were grouped regardless of treatment (Depletion n=4 or 3, Presence n=8 or 9). FVS- viable cells were analyzed for percentage of M1 (F4/80+CD68+CD206-) and M2 (F4/80+CD68+/-CD206+) macrophages, NK cells (CD3-CD4-CD8-CD49b+), NKT cells (CD3+CD4-CD8-CD49b+) and CD11b+Gr1+ MDSCs. (A). Spleens were analyzed as described in A (B). Error bars are SEM.

A.



C.



B.

Liver

Treatment Group	TB		TF	
	Depletion	Presence	Depletion	Presence
Ctrl	5	4 / 1	1	0 / 1
SP16	5	0 / 5	1	0 / 1

Spleen

Treatment Group	TB		TF	
	Depletion	Presence	Depletion	Presence
Ctrl	5	3 / 2	1	0 / 1
SP16	5	0 / 5	1	0 / 1

D.

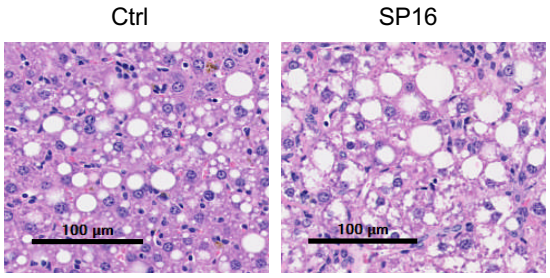


Figure S4. SP16 treatment did not affect tumor incidence, body weight or liver steatosis, *in vivo*. Male DIAMOND mice were started on a WD at two months of age (Ctrl n=6, SP16 n=6). SP16 treatment was started after being on a WD for 28 weeks, WD was continued throughout course. Animals were sacrificed after being on a WD for 48 weeks and their tumor incidence (TF=tumor free, TB=tumor bearing) (A) and body weight was recorded (C). CD4 depletion was not associated with TB or TF status in animals on a WD (B). After sacrifice, livers were subjected to H&E staining, representative pictures are 10X (D). Error bars represent SEM.