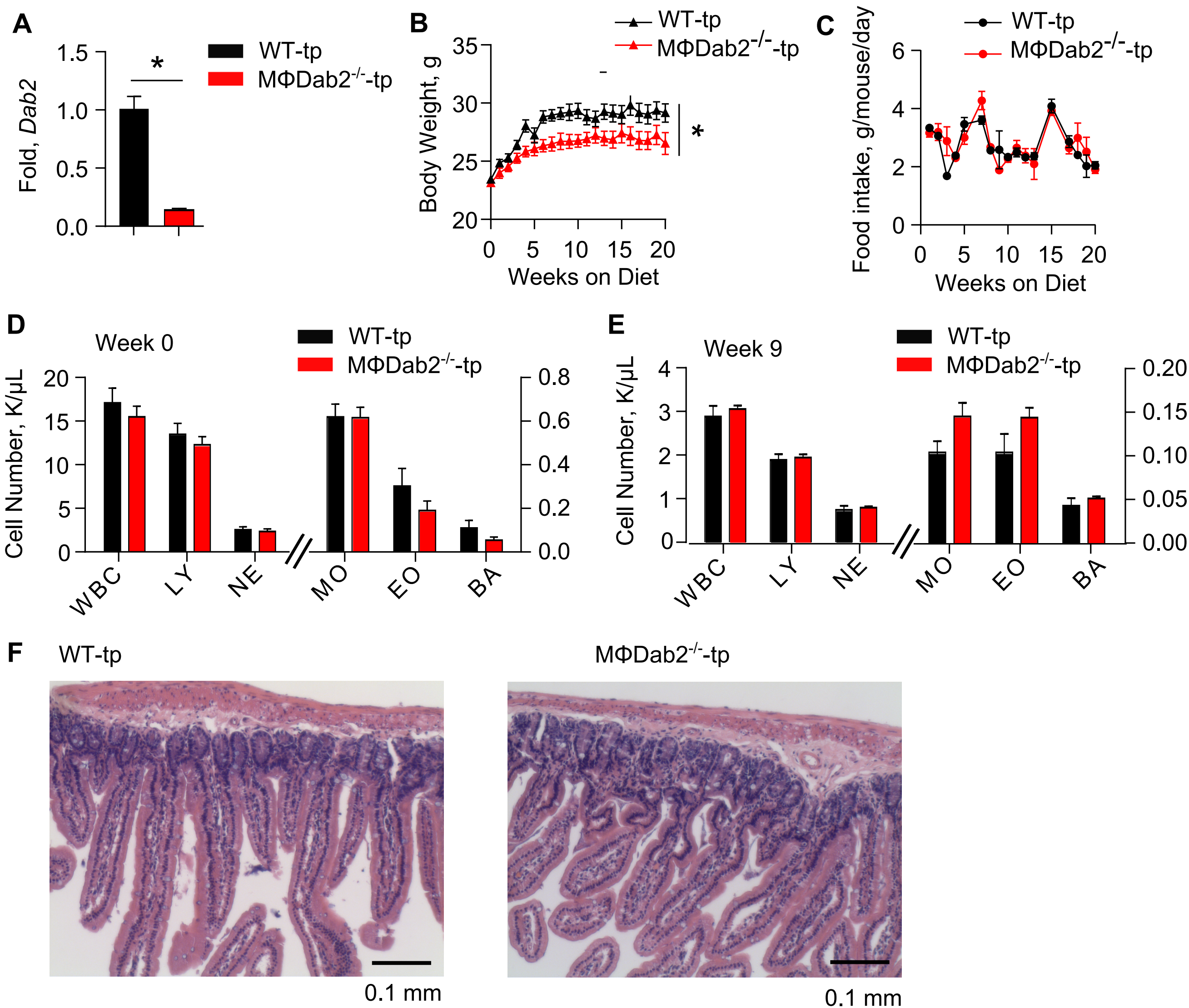


Supplemental Figure I. Transplant of Dab2$^{fl/fl}$ LysM^{Cre} bone marrow into LDLR$^{-/-}$ mice results in decreased dab2 expression in blood and no difference in white blood cell counts. Dab2 null chimeras gain slightly less weight on western diet but have equivalent food intake as WT chimeras.

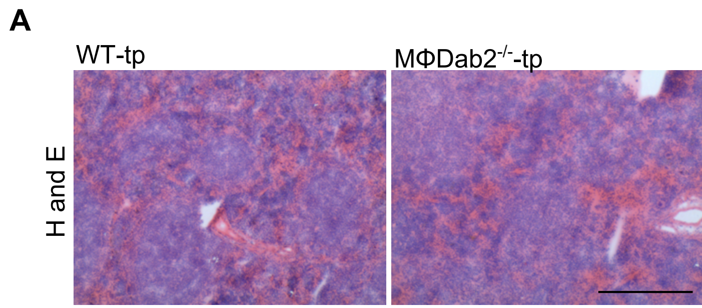
A, Dab2 mRNA levels in blood were determined in WT-tp and MφDab2$^{-/-}$-tp mice (n=20) 4 weeks after transplant. Data are presented as mean +/- s.e.m. *p<0.0001 by Student's t-test, 2-tailed with Welch's correction for unequal variance.

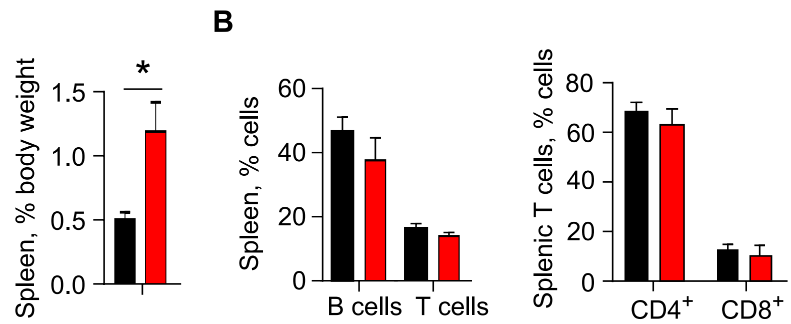
B, WT-tp and MφDab2$^{-/-}$-tp mice (Week 0-9: n=20, Week 10-20: n=12, 11) were fed a western diet and body weight was monitored. Data are presented as mean +/- s.e.m. *p=0.03 by 2-way ANOVA.

C, Food intake was monitored in a subset of WT-tp and MφDab2$^{-/-}$-tp mice (n=5). Data are presented as mean +/- s.e.m.

D,E, Blood analysis from WT-tp and MφDab2$^{-/-}$-tp mice (n=20) 4 weeks post transplant prior to western diet feeding (D) and after 9 weeks of western diet feeding (E) showed and no difference in white blood cells (WBC), lymphocytes (LY), neutrophils (NE), monocytes (MO), eosinophils (EO), or basophils (BA). Data are presented as mean +/- s.e.m.

F, Representative images of hematoxylin and eosin (H&E) stained small intestine of WT-tp and MφDab2$^{-/-}$-tp mice after 20 weeks of western diet.

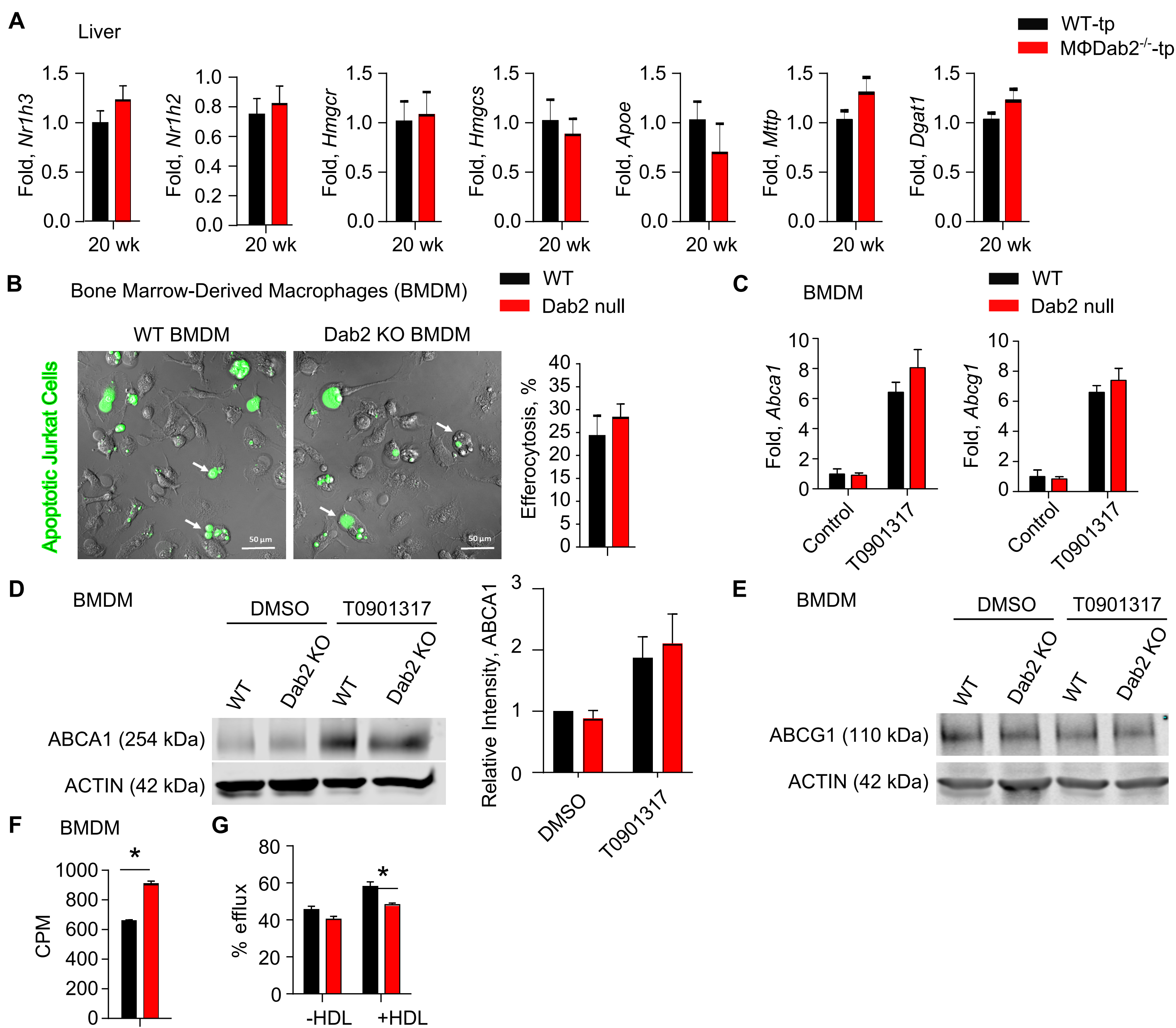




Supplemental Figure II. After 20 weeks of western diet, spleens of MϕDab2$^{-/-}$-tp mice are enlarged compared to WT-tp mice.

A, Representative images of hematoxylin and eosin (H&E) stained spleens of WT-tp and MϕDab2$^{-/-}$-tp mice after 20 weeks of western diet. Scale bar represents 500 µm. Spleen weight as a percentage of total body weight was significantly increased in MϕDab2$^{-/-}$-tp mice compared to WT-tp mice (n=11, 10) fed a western diet for 20 weeks. Data is presented as mean +/- s.e.m. *p=0.016 by Student's t-test, 2-tailed with Welch's correction for unequal variances.

B, Spleens from WT-tp and MϕDab2$^{-/-}$-tp mice after 20 weeks of western diet were processed for flow cytometry analysis of B cell and T cell distribution, utilizing CD19 as a marker for B cells and CD3 as a marker for T cells with further analysis of T cell subsets with CD4 and CD8. n=7. Data are presented as mean +/- s.e.m.



Supplemental Figure III. Analysis of liver expression of lipid metabolism genes and macrophage efferocytosis and cholesterol transport gene expression

A. Expression of genes involved in liver lipid metabolism including Nr1h3 and Nr1h2 which encode the liver X receptors, Hmgcr and Hmgcs which encode HMG-CoA reductase and HMG-CoA synthase, Apoe, Mttp which encodes microsomal triglyceride transfer protein, and Dgat1 which encodes diacylglycerol O-acyltransferase 1 was determined by qRT-PCR in liver tissue from WT-tp and MϕDab2-/--tp mice fed a western diet for 20 weeks (n=12, 10). Data is presented as mean +/- s.e.m.

B, Efferocytosis of apoptotic Jurkat T cells by WT and Dab2 null bone marrow derived macrophages (BMDM) was analyzed by labelling Jurkat T cells with calcein AM (green) and exposing cells to UV irradiation (150 mJ) followed by culture for 3 hours to allow for apoptosis and then incubation with cultured BMDMs for 1 hour at 1:1 ratio. Representative confocal microscopy images show the uptake of apoptotic cells by BMDMs (arrows). Green cells are calcein AM labeled apoptotic Jurkat cells. Quantification of the percentage of apoptotic cell uptake by BMDMs is shown on the right. Data is presented as mean +/- s.d.

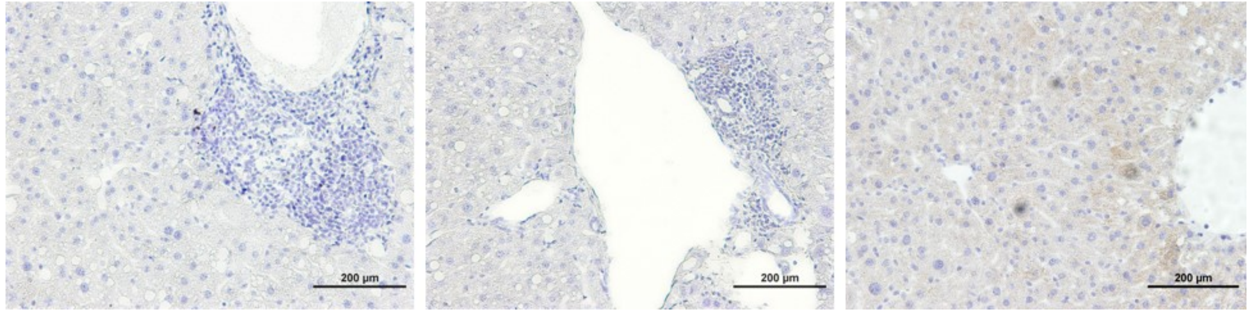
C, Expression of Abca1 and Abcg1 was determined by pRT-PCT in WT and Dab2 null BMDMs, before and after treatment with the LXR agonist T0901317. Data are presented as mean +/- s.e.m.

D, Representative western blot of Abca1 protein in WT and Dab2 null macrophages treated with DMSO as control or LXR agonist T0901317. Quantification shown on right from experiments performed on three separate days. Data normalized to actin loading control, setting DMSO treated WT BMDM to value of 1. Data are presented as mean +/- s.e.m.

E, Representative western blot of Abcg1 protein in WT and Dab2 null macrophages treated wtih DMSO as control of LXR agonist T0901317. Experiment was performed on 2 separate days with similar results.

F,G, WT and Dab2 null macrophages were incubated with 3H-cholesterol and cholesterol accumulation as well as HDL-mediated efflux were examined as described previously. Data are presented as mean +/- s.e.m. *p<0.05 by Student's t-test.

For B-G, WT BMDM were isolated from Dab2fl/fl mice and Dab2 null BMDM were isolated from Dab2fl/fl LysMCre mice.



Supplemental Figure IV. Immunohistochemical analysis of paraffin embedded mouse liver sections with isotype control antibodies. Liver tissue sections were incubated with the non-immune antibodies of the same isotypes (Rat IgG2b, Rat IgG2a and rabbit IgG control (polyclonal) at the same concentration as the primary antibodies used for immunostaining of Caspase 3 and αSMA (in aortic roots) and CD3, B220, and Mac2 -positive cells in liver tissue followed by the incubation with appropriate secondary antibodies. Incubation with isotype controls showed negligible background staining.

Table 1-PCR primers

Gene Name	Forward Primer Sequence	Reverse Primer Sequence
Il6	CCACGGCCTTCCCTACTTCA	TGCAAGTGCATCATCGTTGTTC
Tnfα	GAACTGGCAGAAGAGGCACT	AGGGTCTGGGCCATAGAACT
IL1β	TACCAGTTGGGGAACTCTGC	CAAAATACCTGTGGCCTTGG
B2M	GCTATCCAGAAAACCCCTCAAATTCA	GCAGGCGTATGTATCAGTCTCAGTG
Ifnγ	TTGATGATGACCCTGTGCCTTGG	GATTCTGAAGTGCTGCGTTGATGG
Cxcl13	AAGAGGTTTGCGAGATGGACTT	CTGCGTTTTACAAGGGTGCA
Lta	CCAAGAATTGGATTCCAGGC	TGTGACCCTTGAAACAACGGT
Ccl20	GTGGCAAGCGTCTGCTCTTC	GGTGAGCCAGCAGTACCCAT
Pparα	CACTGTTCTGGAGGGTGTAACTGAC	GCCATGCCCACACGCTGAGG
Abca1	GCTCTCAGGTGGGATGCAG	GGCTCGTCCAGAATGACAAC
Abcg1	ATCTGAGGGATCTGGGTCTGA	CCTGATGCCACTTCCATGA
LXRα (Nr1h3)	CTTGCTCATTGCTATCAGCATCTT	ACATATGTGTGCTGCAGCCTCT
LXRβ (Nr1h2)	CAGATGGACGCTTTCATGCG	CTGCTGTTTCCGAATCTTCTTCT
VLDLR	GAGCCCCTGAAGGAATGCC	CCTATAACTAGGTCTTTGCAGATATGG