Supplementary Figure Legends

Suppl. Figure 1. Hepatic type I interferon signalling does not modulate susceptibility to metabolic disease induced by a high-fat diet. (A) *Ifnar1* and *Ifnar2* expression relative to *β-Actin* determined by qPCR of 24h-stimulated FL83B hepatocytes and RAW264.7 macrophages. **(B)** Expression of *Ifnar1* and *Ifnar2* in the liver, adipose tissue and intestine of indicated genotypes. Note that *Alb-Cre;Ifnar1*$^{fl/fl}$ mice specifically delete *Ifnar1* in the liver. **(C-E)** Mice were exposed to a high-fat or low-fat (control) diet and were analysed after 16 weeks with **(C)** Body weight in percent at indicated timepoints, **(D)** liver-to-body-weight ratio and **(E)** epididymal white adipose tissue to body weight ratio. **(F, G)** Mice were exposed to a low-fat diet and were analysed after 16 weeks, glucose tolerance test **(F)**, insulin tolerance test **(G)**. **(H, I)** Mice were exposed to a high-fat diet and were analysed after 16 weeks. Representative images of H&E sections **(H)** with quantification of steatosis in **(I)**. **(J)** Expression of lipogenic genes in indicated genotypes fed the MCD diet determined by qPCR and normalised to β-*Actin*. **(K-M)** Mice were exposed to a MCD diet for 24 days and body weight at indicated timepoints **(K)**, liver-to-body-weight ratio **(L)** and plasma ALT **(M)** were monitored. Data are expressed as mean ± SEM (A-M), n = 3 (A), n = 7-10 (B-M). One-way ANOVA with Bonferroni correction (A, M), two-way repeated measures ANOVA (C, F, G, K). Unpaired Student's *t*-test (B, D, E, I, J, L). ***P<0.001, ** P<0.01, *P<0.05.

Suppl. Figure 2. Adipose type I interferon signalling does not modulate susceptibility to hepatic disease induced by a MCD diet. (A) Adipose tissue expression of *Ifnar1* in wild-type mice after exposure to a low- or high-fat diet determined by qPCR relative to *c-β-Actin*. **(B)** Expression of *Ifnar1* and *Ifnar2* in adipose tissue of indicated genotypes determined by qPCR relative to *c-β-Actin*. Note that the remaining *Ifnar1* expression in adipose tissue of *Ifnar1*$^{\Delta at}$ mice may be explained by non-adipose cells in adipose tissue (e.g. fibroblasts, endothelium or immune cells) that are not affected by *Ifnar1* deletion. **(C)** Body weight of indicated genotypes on a normal chow diet. **(D, E)** Non-essential fatty acids (NEFA, **D**) and triglyceride **(E)** concentrations in the serum of indicated genotypes. **(F-I)** Mice were exposed to a MCD diet for 24 days and body weight at indicated timepoints **(F)**, liver-to-body-weight ratio **(G)** and plasma ALT **(H)** were monitored. **(I)** Quantification of steatosis based on H&E sections. Data are expressed as mean ± SEM (A-I), n = 6-10 (A-I). Two-way repeated measures ANOVA (C, F). Unpaired Student's *t*-test (A, B, D, E, G, I). ***P<0.001, **P<0.01.

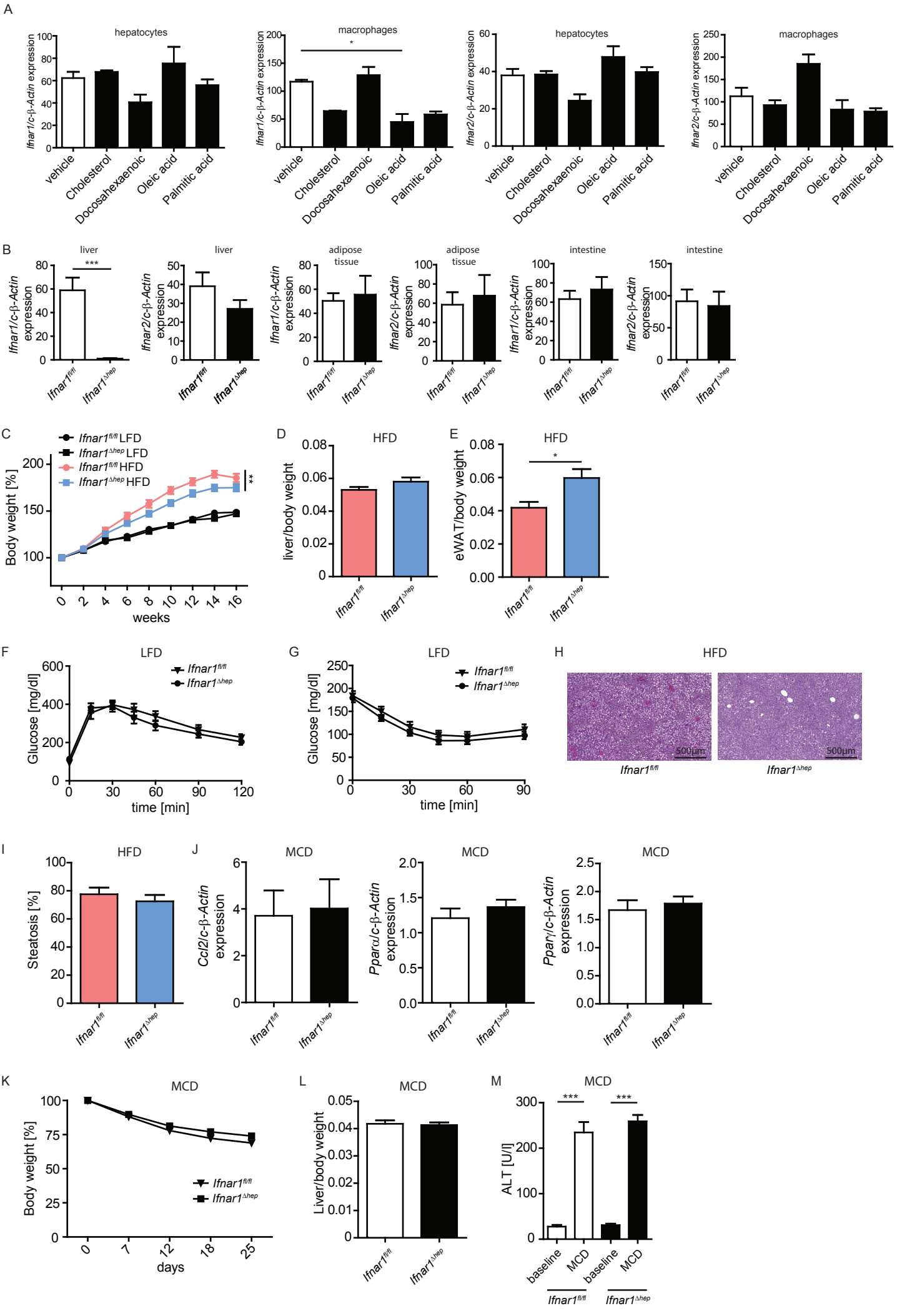
Suppl. Figure 3. Intestinal-epithelial type I interferon signalling does not modulate susceptibility to hepatic or metabolic disease on a high-fat or MCD diet. (**A, B)** Liver-to-body-weight ratio **(A)** and epididymal white adipose tissue weight **(B)** of indicated genotypes on a high-fat diet. **(C, D)** Mice were exposed to a low-fat diet and were analysed after 16 weeks, glucose tolerance test **(C)**, insulin tolerance test **(D)**. **(E-G)** Mice were exposed to a MCD diet for 24 days and body weight at indicated timepoints **(E)**, liver-to-body-weight ratio **(F)** and plasma ALT **(G)** were monitored. Data are expressed

as mean ± SEM (A-G), n = 9-10 (A-G). Two-way repeated measures ANOVA (C-E). Unpaired Student's *t*-test (A, B, F, G). ***P<0.001.

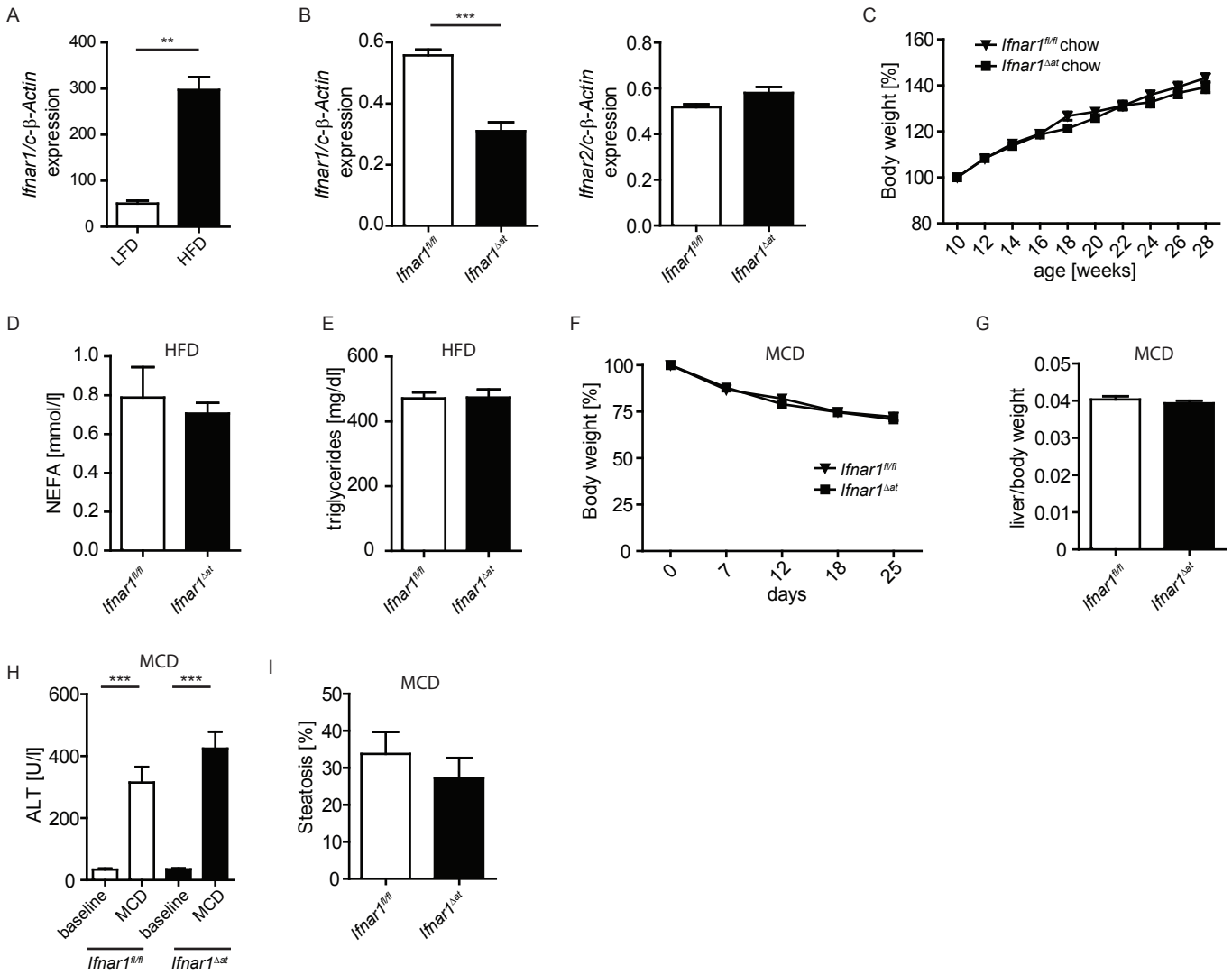
Suppl. Figure 4. Myelocyte type I interferon signalling does not modulate susceptibility to hepatic or metabolic disease on a high-fat or MCD diet. (**A, B)** Liver-to-body-weight ratio **(A)** and epididymal white adipose tissue weight **(B)** of indicated genotypes on a high-fat diet. **(C, D)** Mice were exposed to a low-fat diet and were analysed after 16 weeks, glucose tolerance test **(C)**, insulin tolerance test **(D)**. **(E-G)** Mice were exposed to a MCD diet for 24 days and body weight at indicated timepoints **(E)**, liver-to-body-weight ratio **(F)** and plasma ALT **(G)** were monitored. Data are expressed as mean ± SEM (A-G), n = 9-10 (A-G). Two-way repeated measures ANOVA (C-E). Unpaired Student's *t*-test (A, B, F, G). ***P<0.001.

Suppl. Figure 5. Type I interferon regulated gene expression correlates with TNF and IL-6 expression in the liver. (**A, B)** Expression of type I interferon regulated genes (*OAS1, MX1, G1P2, IFIT1*) where correlated with *IL-6* **(A)** and *TNFα* **(B)** expression, respectively, in liver biopsies from obese patients before and 6 months after LAGB. Pearson correlation was performed with indicated r_s coefficient and p-values in the figure. Note that TNF expression positively correlates with type I interferon responses **(B)**.

Suppl. Figure 1



Suppl. Figure 2



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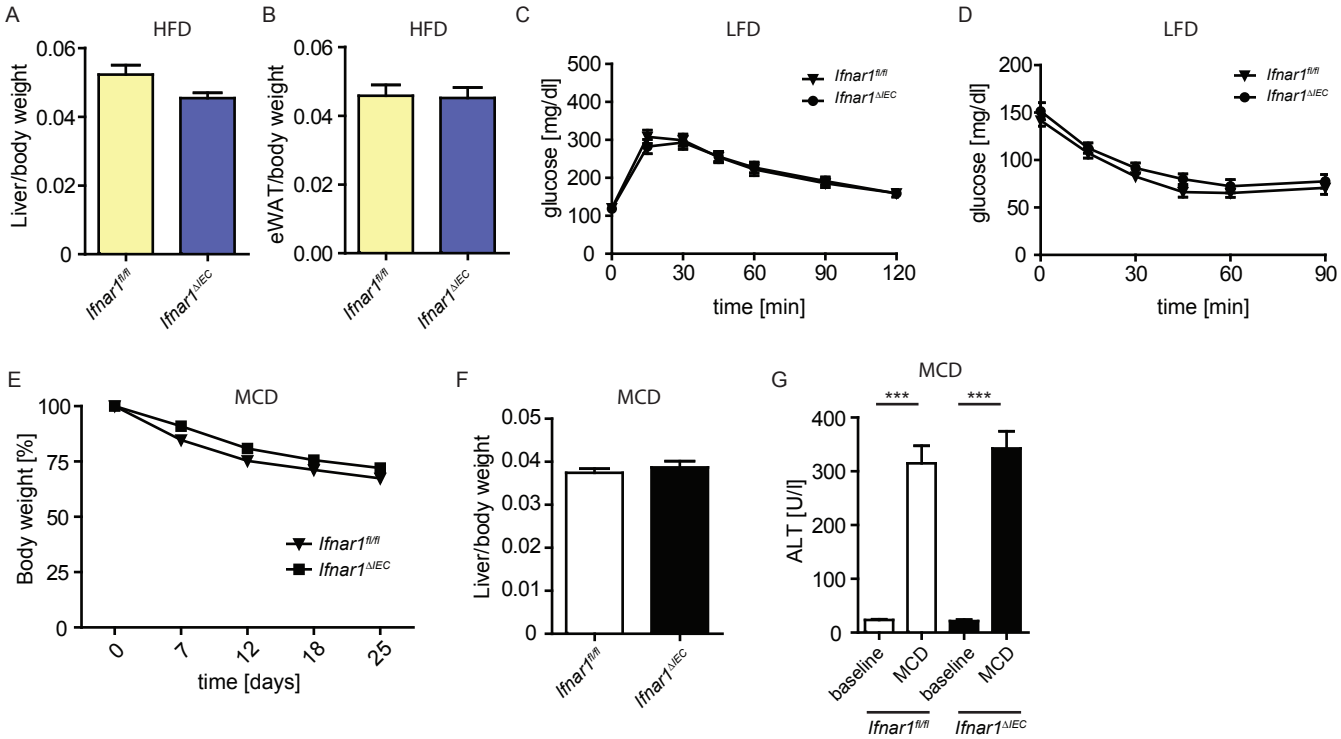

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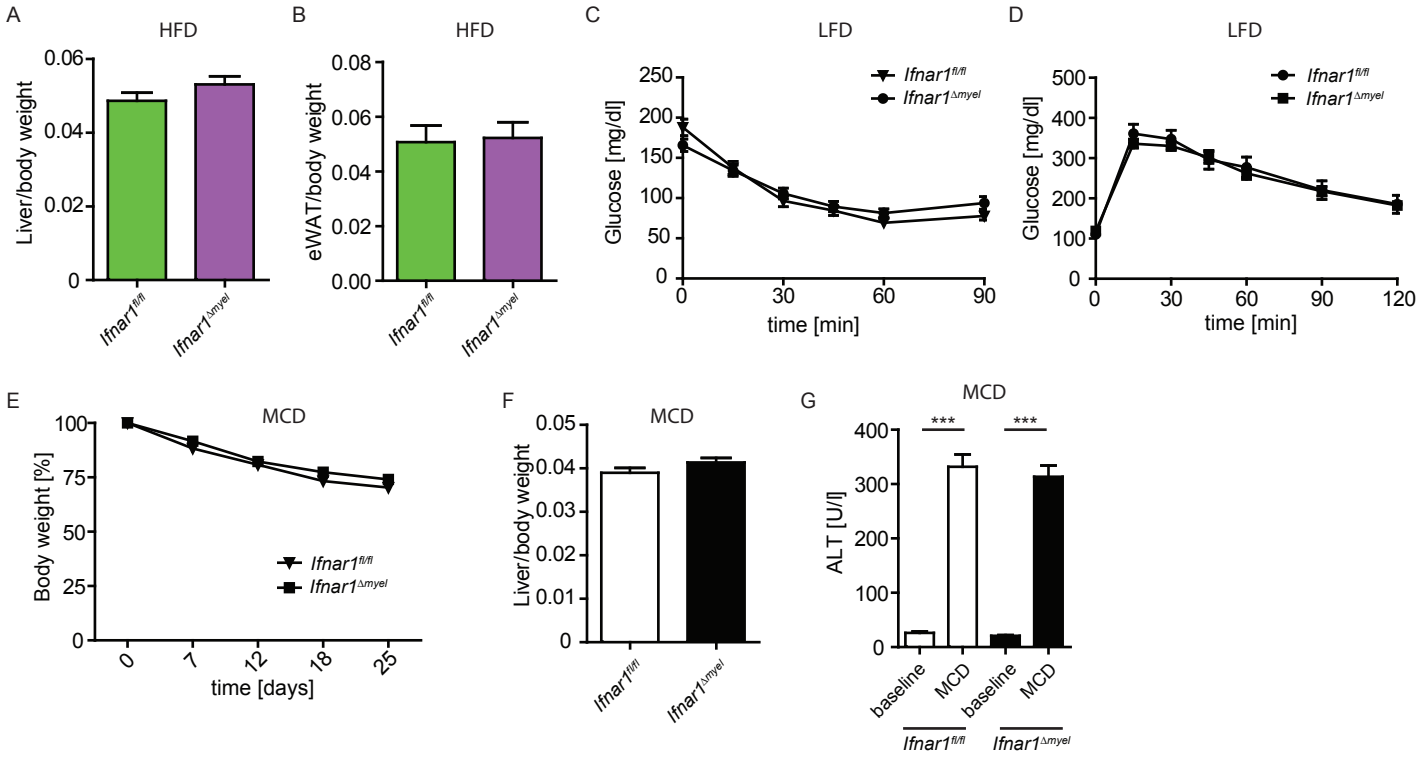

Suppl. Figure 5