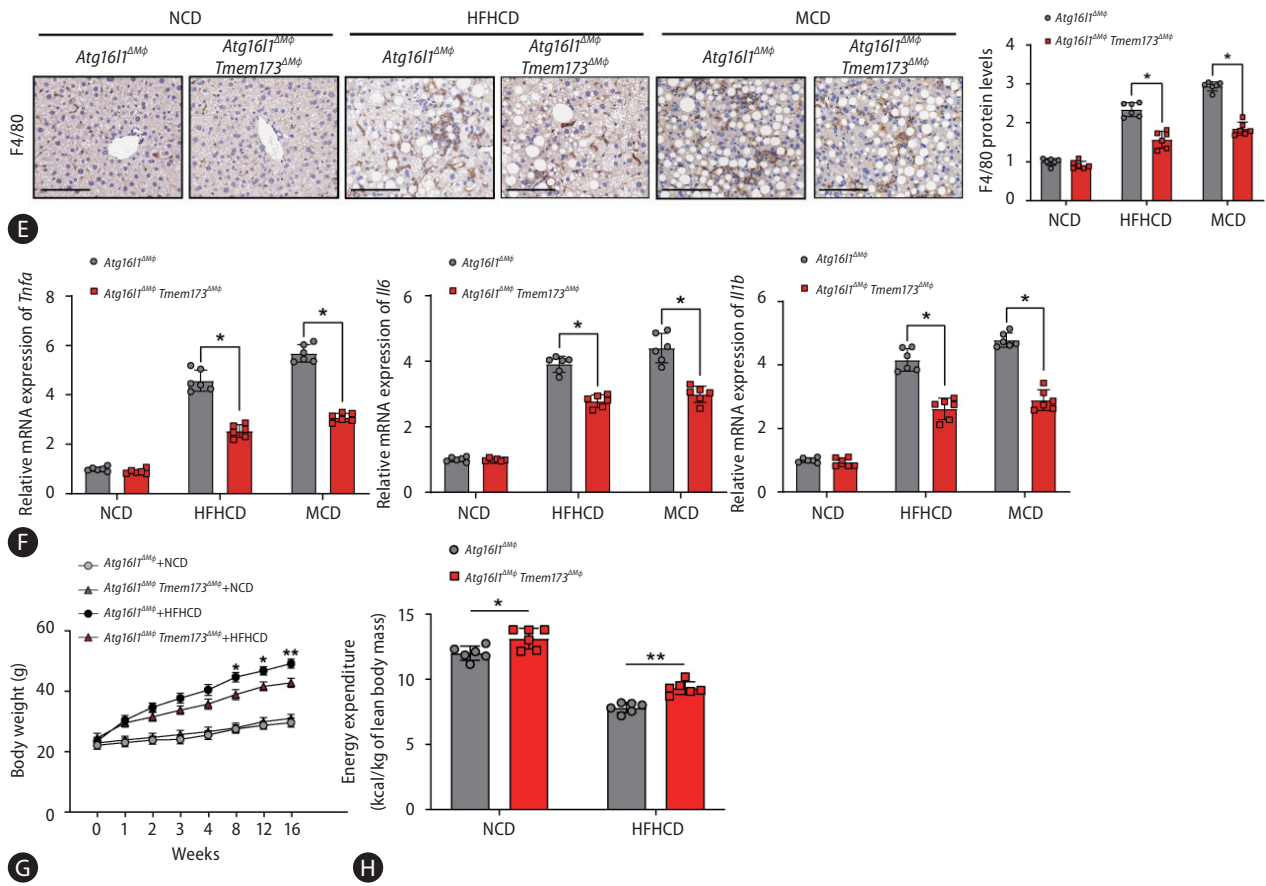


**Supplementary Figure 6.** Macrophage *Tmem73* knockout attenuates the progression of *Atg16l1* knockout-mediated experimental steatohepatitis. (A) Representative H&E staining, oil red O staining, Sirius Red staining, and  $\alpha$ -SMA immunohistochemical analysis of liver tissues from MASH mice fed an HFHCD or MCD. (B) NAS, serum ALT levels, and hepatic triglyceride content in the *Atg16l1* <sup>$\Delta$ M $\phi$</sup>  and *Atg16l1* <sup>$\Delta$ M $\phi$</sup> *Tmem73* <sup>$\Delta$ M $\phi$</sup>  mice fed an HFHCD or MCD; n=6/group. (C) The gene expression levels of *Acta2*, *Col1a1*, and *Timp1* in liver tissues from *Atg16l1* <sup>$\Delta$ M $\phi$</sup>  and *Atg16l1* <sup>$\Delta$ M $\phi$</sup> *Tmem73* <sup>$\Delta$ M $\phi$</sup>  mice fed an HFHCD or MCD were examined by quantitative real-time PCR; n=6 mice/group. (D) The protein expression levels of  $\alpha$ -SMA, collagen-I, and TIMP-1 in liver tissues from *Atg16l1* <sup>$\Delta$ M $\phi$</sup>  and *Atg16l1* <sup>$\Delta$ M $\phi$</sup> *Tmem73* <sup>$\Delta$ M $\phi$</sup>  mice fed an HFHCD or MCD were examined by Western blotting. (E) Immunohistochemistry results of F4/80<sup>+</sup> cells in liver tissues from MASH mice fed an HFHCD or MCD. (F) The expression of the proinflammatory genes *Tnfa*, *Il6*, and *Il1b* in liver tissues from *Atg16l1* <sup>$\Delta$ M $\phi$</sup>  and *Atg16l1* <sup>$\Delta$ M $\phi$</sup> *Tmem73* <sup>$\Delta$ M $\phi$</sup>  MASH mice fed an HFHCD or MCD. (G) Body weights of HFHCD-fed or chow-fed *Atg16l1* <sup>$\Delta$ M $\phi$</sup>  and *Atg16l1* <sup>$\Delta$ M $\phi$</sup> *Tmem73* <sup>$\Delta$ M $\phi$</sup>  mice; n=6 per group. (H) The EE of the *Atg16l1* <sup>$\Delta$ M $\phi$</sup>  and *Atg16l1* <sup>$\Delta$ M $\phi$</sup> *Tmem73* <sup>$\Delta$ M $\phi$</sup>  mice fed an HFHCD or NCD was calculated as (3.815+1.232×RER)×VO2/lean mass (n=6). ATG16L1, autophagy-related protein 16-like 1; MASH, metabolic dysfunction-associated steatohepatitis; HFHCD, high-fat and high-cholesterol diet; MCD, methionine- and choline-deficient diet; ALT, alanine aminotransferase; AST, aspartate aminotransferase; NAS, NAFLD activity score; EE, energy expenditure. The data are expressed as the mean±SD. \**P*<0.05, \*\**P*<0.01 (unpaired t test or ANOVA).



**Supplementary Figure 6. Continued.**