

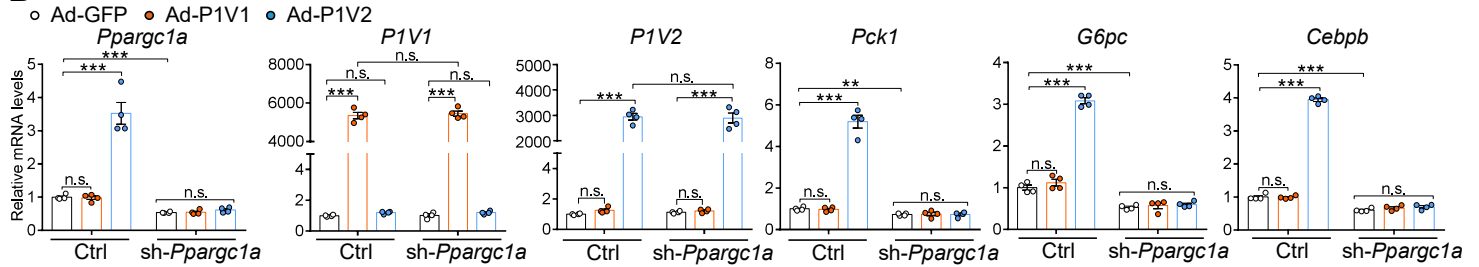
Supplementary Figure 5 (Related to Figure 3)

A



Primary hepatocytes of *Prmt1* floxed mice after tail vein injection with Ad-Cre

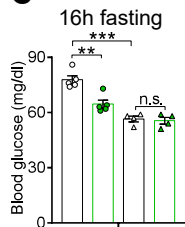
B



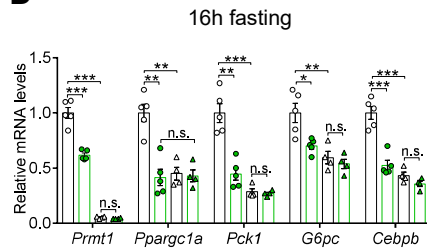
Prmt1 liver specific KO mice

○ flox+Ctrl ● flox+sh-Ppargc1a ▲ Cre+Ctrl ▲ Cre+sh-Ppargc1a

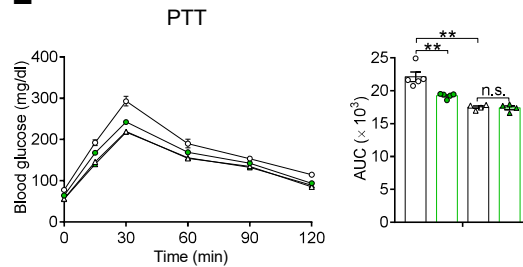
C



D



E



Supplementary Figure 5. Related to Figure 3. PRMT1V2 activates hepatic gluconeogenesis through PGC1 α . A) Schematic of the experiment. *Prmt1*^{flox} mice were injected with indicated adenovirus through tail vein for CRE-mediated deletion. Seven days after first injection, the mice were injected with indicated adenoviruses through tail vein for knockdown of *Ppargc1a*. B) qPCR analyses of *Ppargc1a*, *P1V1*, *P1V2*, and gluconeogenic marker mRNA levels in primary hepatocytes isolated from mice described in (A) and infected with indicated adenoviruses (n = 4/group). C) Blood glucose levels of 16 hour-fasted *Prmt1*^{flox} and *Alb-Cre;Prmt1*^{flox} injected with indicated adenoviruses (n = 5 for *Prmt1*^{flox}, n = 4 for *Alb-Cre;Prmt1*^{flox}). D) qPCR analyses of *Prmt1* and gluconeogenic marker mRNA levels in the liver of 16 hour-fasted mice described in (C) (n = 5 for *Prmt1*^{flox}, n = 4 for *Alb-Cre;Prmt1*^{flox}). E) PTT in 16 hour-fasted mice described in (C) (n = 5 for *Prmt1*^{flox}, n = 4 for *Alb-Cre;Prmt1*^{flox}). AUC, area under the curve. Data are presented as mean \pm SEM. **P* < 0.05; ***P* < 0.01; ****P* < 0.001. n.s., not significant. 2-way ANOVA (B-E).