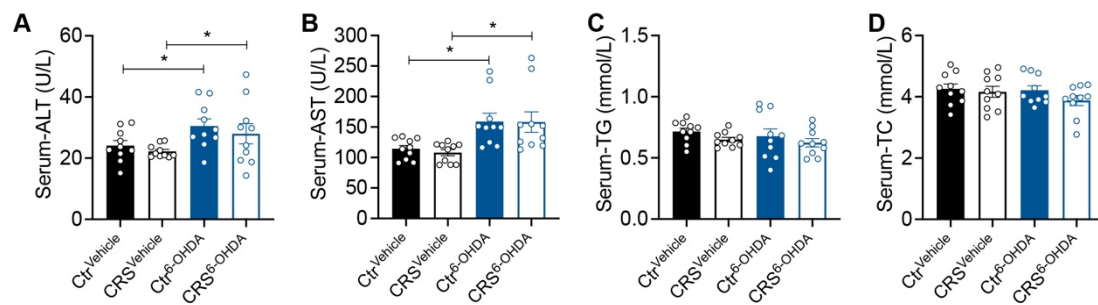
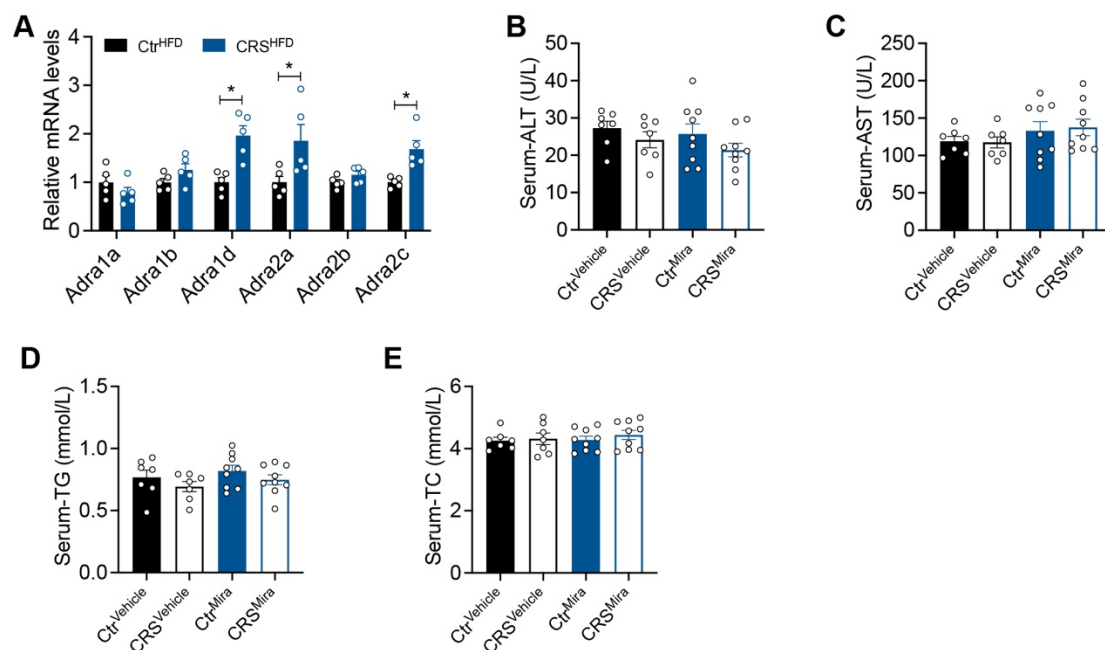


## Supplemental Figures



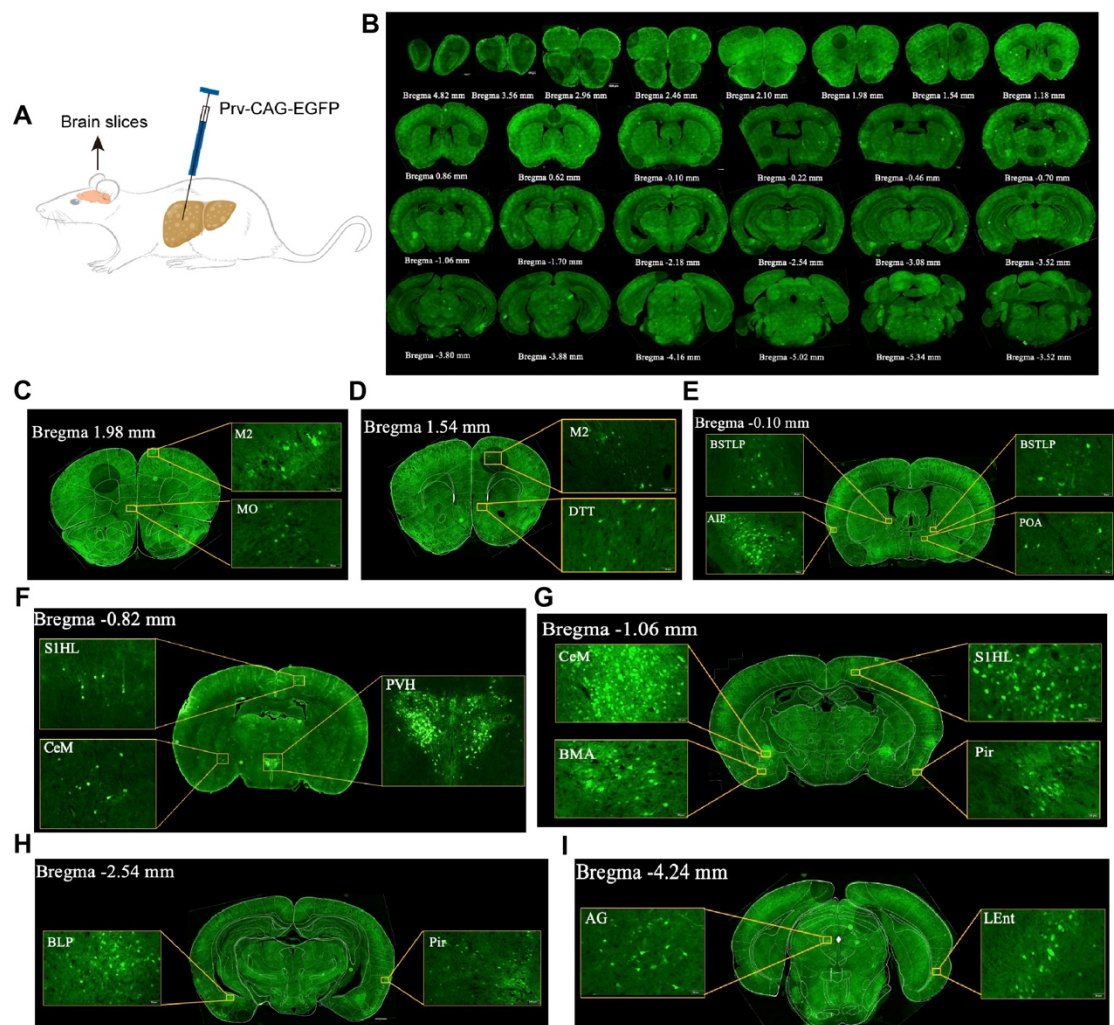
**Figure S1. Serum biochemical indicators of sympathetic ablated mice**

(A-D) Serum ALT, AST, TG and TC concentrations,  $n = 10$  per group. The data are presented as mean  $\pm$  SEM. \* $P < 0.05$ . Unpaired two-tailed Student's *t*-test was used for statistical analysis.



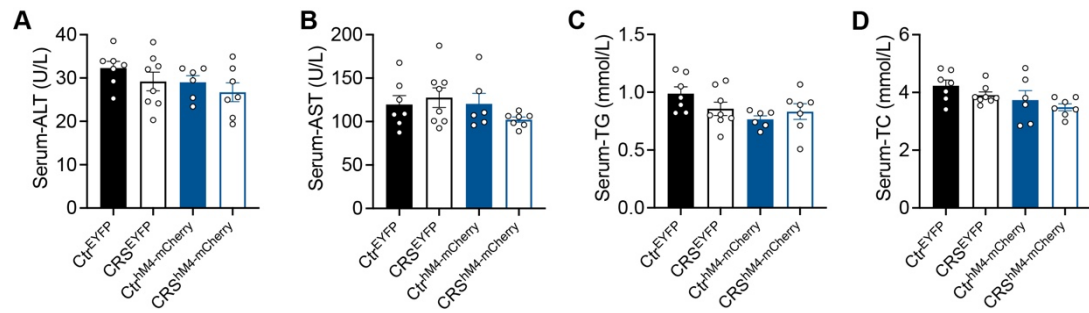
**Figure S2. Hepatic  $\alpha$ -ARs expression of CRS mice and serum biochemical indicators of mirabegron gavage mice**

(A) Relative mRNA levels of  $\alpha$ -ARs,  $n = 5$  per group. (B-E) Serum ALT, AST, TG and TC concentrations,  $n = 7:7:9:9$ . The data are presented as mean  $\pm$  SEM. \* $P < 0.05$ . Unpaired two-tailed Student's *t*-test was used for statistical analysis.



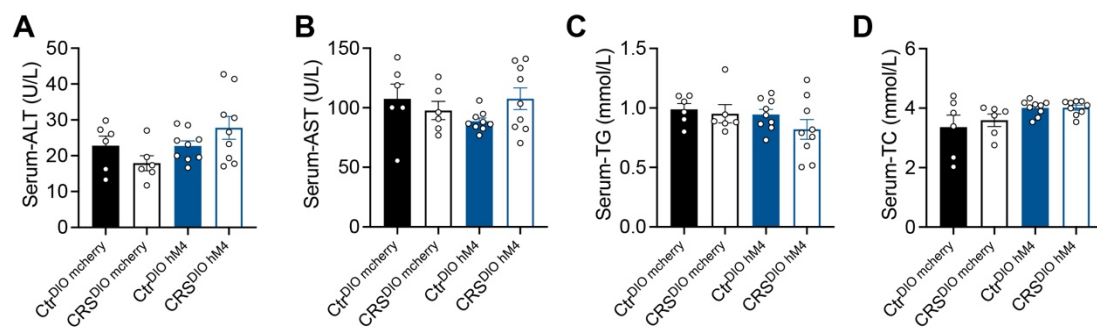
**Figure S3. Retrograde tracing of hepatic neurons**

(A) Experimental scheme of PRV injection. (B-I) GFP expression in brain regions.



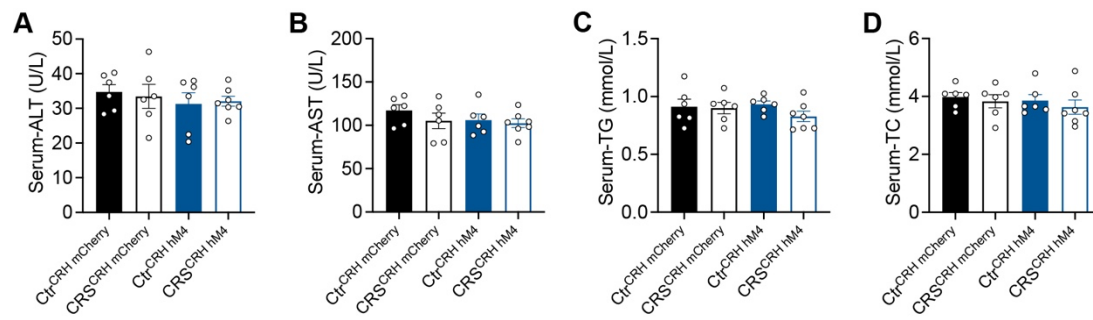
**Figure S4. Serum biochemical indicators of PVH neuronal activity inhibited mice**

(A-D) Serum ALT, AST, TG and TC concentrations,  $n=7:8:6:7$ . The data are presented as mean  $\pm$  SEM.  $*P < 0.05$ . Unpaired two-tailed Student's  $t$ -test was used for statistical analysis.



**Figure S5. Serum biochemical indicators of CeM-PVH projection inhibited mice**

(A-D) Serum ALT, AST, TG and TC concentrations,  $n=6:6:9:9$ . The data are presented as mean  $\pm$  SEM.  $*P < 0.05$ . Unpaired two-tailed Student's  $t$ -test was used for statistical analysis.



**Figure S6. Serum biochemical indicators of CRH<sup>PVH</sup> neuronal activity inhibited mice**

(A-D) Serum ALT, AST, TG and TC concentrations, n=6:6:6:7. The data are presented as mean ± SEM. \* $P < 0.05$ . Unpaired two-tailed Student's  $t$ -test was used for statistical analysis.