



**Figure S1** Mirabegron did not change the SBP in rats. To figure out the off-target effect of mirabegron, the SBP was checked in mirabegron-treated rats of either healthy or MCT rats. The figure shows the quantification of SBP in healthy rats with mirabegron treatment. No significant change was observed among the groups. NS, non-significance; SBP, systolic blood pressure; HC, healthy control; Mira, mirabegron; MCT, monocrotaline.

**Table S1** Primers for RT-qPCR

Gene	Primer	Sequence (5'-3')
<i>B3AR</i>	Forward	CCTAGCCGTCACCAACCCTCT
	Reverse	GACGAAGAGCATCACAAGGAG
<i>GAPDH</i>	Forward	TCTCTGCTCCTCCCTGTTCT
	Reverse	ATCCGTTACACCCGACCTTC

RT-qPCR, real-time quantitative PCR.

**Table S2** Primary antibodies used in immunoblotting

Antibody targets	Supplier	Catalog. No.	Dilution	MW (kDa)
B3AR	Abcam	ab101095	1:500	43
Collagen I	Proteintech	14695-1-AP	1:1,000	130
TIMP1	Proteintech	16644-1-AP	1:1,000	23
BNP	Proteintech	13299-1-AP	1:500	35
Drp1	CST	8570S	1:1,000	80
Phospho-Drp1 (Ser616)	CST	3455	1:1,000	80
Phospho-Drp1 (Ser637)	CST	4867S	1:1,000	80
AMPK $\alpha$	CST	2532	1:1,000	60
Phospho-AMPK $\alpha$ (Thr172)	CST	2535	1:1,000	60
mTOR	CST	2983S	1:1,000	289
Phospho-mTOR (Ser2448)	CST	5536S	1:1,000	289
GAPDH	CST	2118	1:5,000	37

B3AR,  $\beta$ 3 adrenoceptor; TIMP1, tissue inhibitor of metalloproteinases 1; BNP, brain natriuretic peptide; Drp1, dynamin-related protein 1; AMPK, AMP-activated protein kinase; CST, Cell Signaling Technology; MW, molecular weight.