

Table S3. Metabolites exhibiting significant differences in relative quantity in left ventricles of KO mice compared to WT

Metabolite	$\log_2(\text{KO}/\text{WT})^1$	$t$ -Test <sup>2</sup>
<i>Acyl-carnitines</i> <sup>3</sup>		
6:0	-0.89	0.0436
16:0	-1.52	0.0109
18:0	-2.51	0.0003
18:1	-1.33	0.0125
<i>Ceramides</i> <sup>4</sup>		
C8-Dihydroceramide	2.33	0.0002
Cer(32:1)	0.97	0.0014
Cer(33:1)	1.23	0.0009
Cer(34:1)	0.35	0.0192
Cer(36:1)	0.54	0.0003
Cer(36:2)	1.60	<0.0001
Cer(37:1)	0.65	0.0002
Cer(38:1)	0.34	0.0007
Cer(38:2)	0.23	0.0055
Cer(40:1)	0.23	0.0402
Cer(42:1)	0.27	0.0139
<i>TCA cycle and related metabolites</i> <sup>5</sup>		
Aconitate	1.38	0.0026
Citrate	1.20	0.0023
Succinate	0.57	0.0200
Hydroxyglutarate	0.75	<0.0001

<sup>1</sup> Ratio of normalized extracted ion current peak areas

<sup>2</sup> P-values, two-tailed Student's t-test

<sup>3</sup> Number of carbons:number of double bonds

<sup>4</sup> Shown in parentheses are the total number of carbons:total number of double bonds

<sup>5</sup>  $\alpha$ -Ketoglutarate, malate and pyruvate did not exhibit significant differences in relative peak area; fumarate and oxaloacetate were not detected.