Figure S1

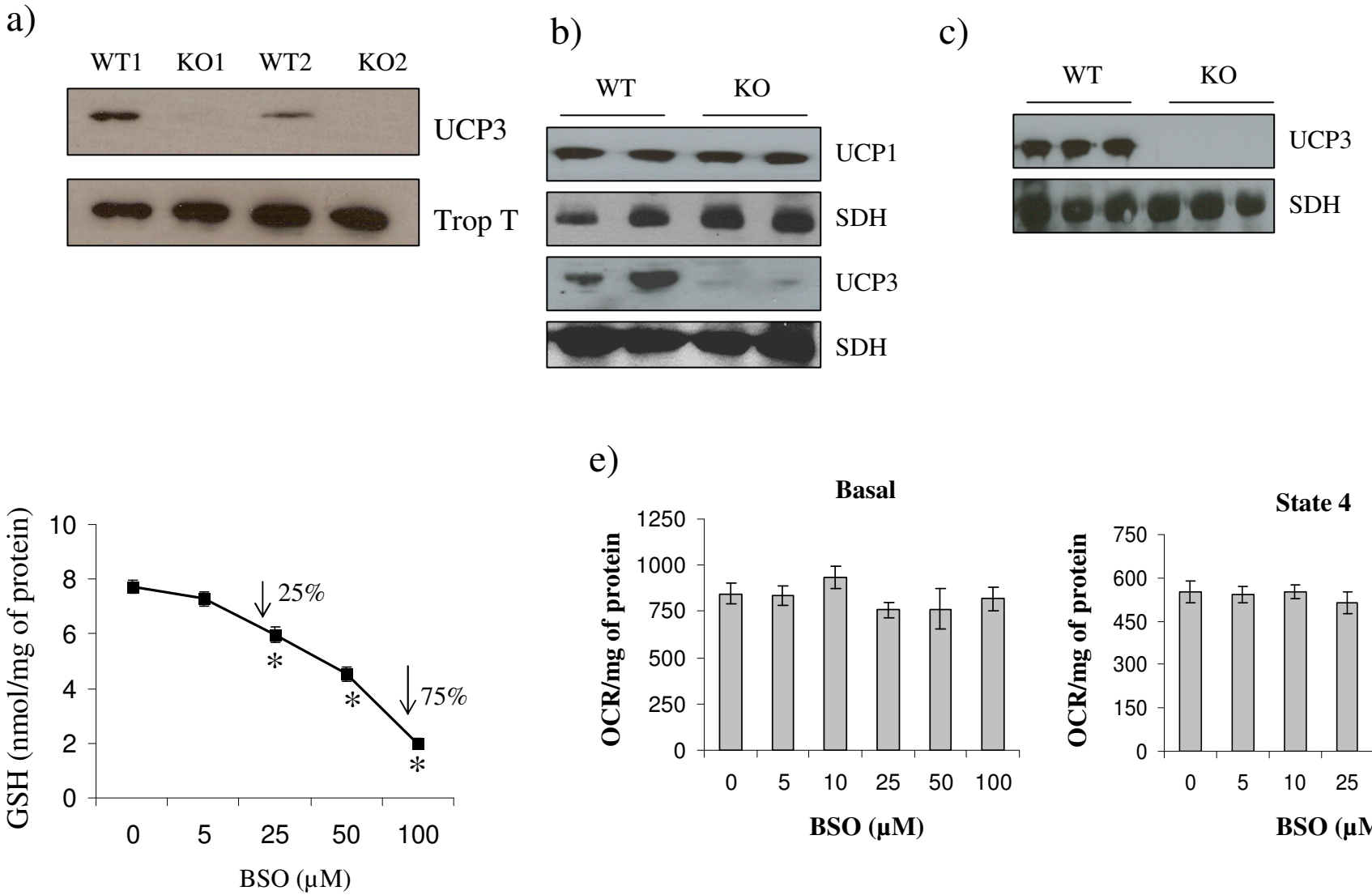
a)
WT1
KO1
WT2
KO2
UCP3
Trop T
b)
WT
KO
UCP1
SDH
UCP3
SDH
c)
WT
KO
UCP3
SDH
d)
GSH (nmol/mg of protein)
10
8
6
4
2
0
25%
75%
*
*
*
0
5
25
50
100
BSO (µM)
e)
Basal
OCR/mg of protein
1250
1000
750
500
250
0
0
5
10
25
50
100
BSO (µM)
State 4
OCR/mg of protein
750
600
450
300
150
0
0
5
10
25
50
100
BSO (µM)

Figure S1: **a)** Immunodetection of UCP3 in primary myotubes from WT and UCP3 null (KO) mice. Troponin T (Trop T), a biomarker for muscle cell differentiation, was used as the loading control. Each lane represents samples collected from different cultures. **b)** Immunoblot analysis of UCP1 and UCP3 in BAT mitochondria isolated from WT and UCP3 null (KO) mice. 100µg of mitochondrial protein was used for the detection of UCP3. 10µg of mitochondrial protein was used for UCP1. SDH served as the loading control. Each lane represents a different mitochondrial sample isolated from different mice. **c)** Immunoblot analysis of UCP3 in skeletal muscle mitochondria isolated from WT and UCP3 null (KO) mice. SDH served as the loading control. Each lane represents a different mitochondrial sample isolated from different mice. UCP1, UCP3, troponin T, and SDH were detected using anti-UCP1, anti-UCP3, anti-troponin T, and anti-SDH antibodies. **d)** BSO depletes cellular GSH levels. WT primary myotubes were exposed to 0-100µM BSO for 24h and then the total cellular GSH levels were determined using a GSH detection kit. Estimation of cellular GSH was normalized to protein levels. n=4, * $p<0.05$, 1-way ANOVA with a Tukey's post-hoc test. **e)** Impact of BSO on the mitochondrial bioenergetic parameters of WT primary myotubes. WT primary myotubes were exposed to different concentrations of BSO for 24h and then parameters were assessed in the Seahorse Extracellular Flux Analyzer. Following the determination of basal OCR, state 4 OCR was tested by treating cells with oligomycin (1µg/mL). n=3.