

Supplementary Information

Neuregulin 1 improves complex 2-mediated mitochondrial respiration in skeletal muscle of healthy and diabetic mice

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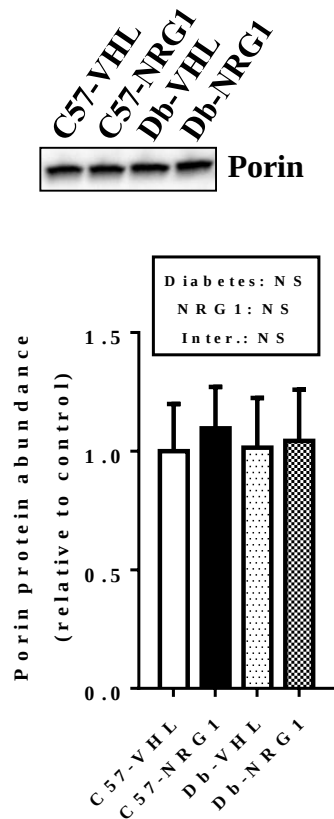
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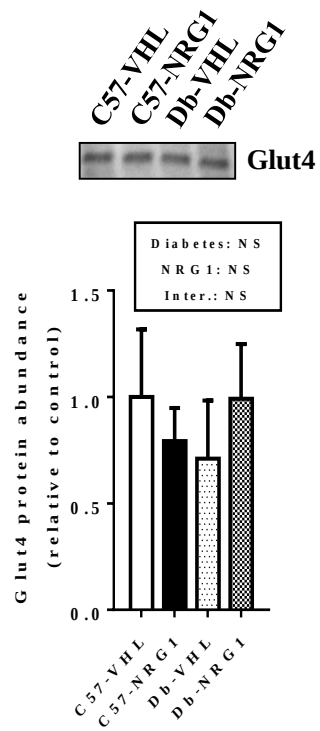
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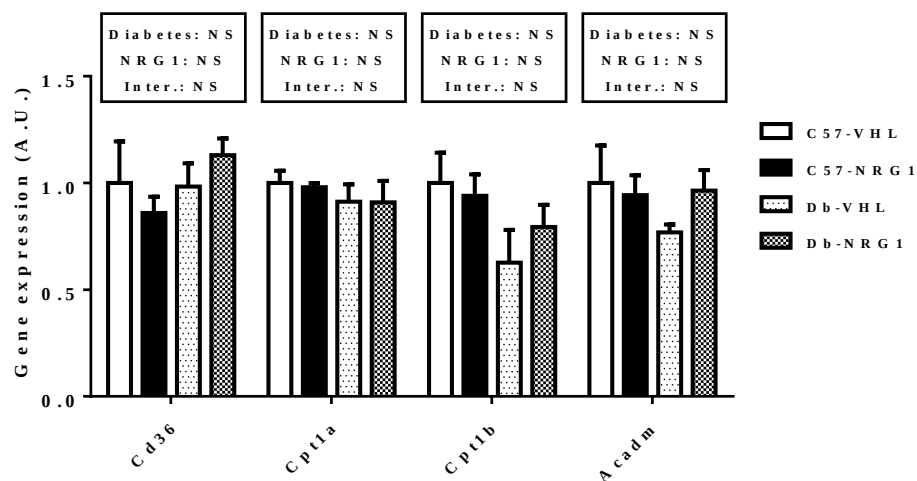
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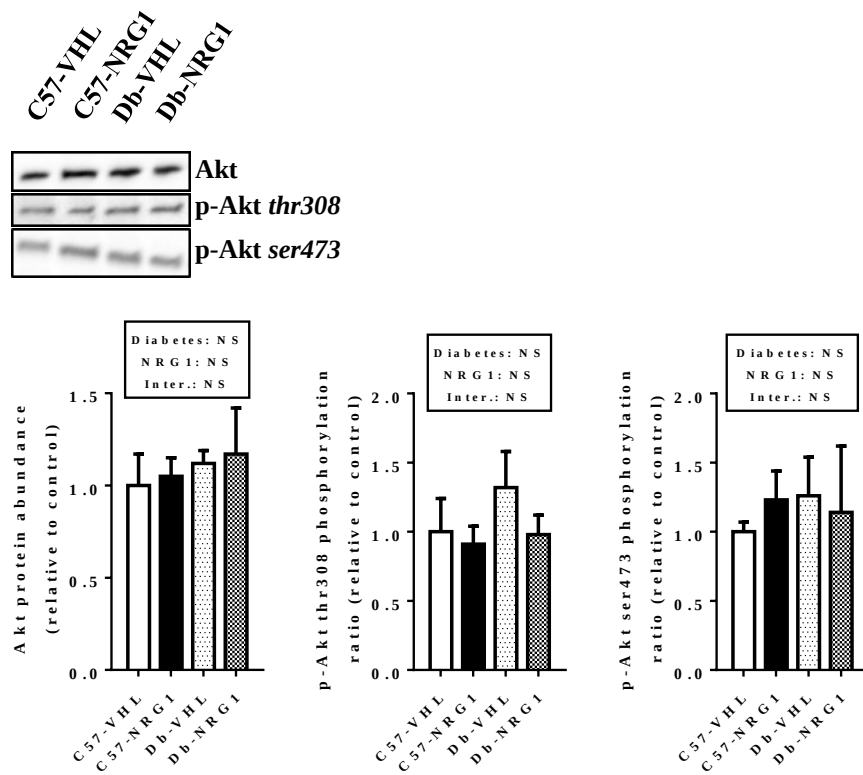
Supplementary Figure S1. The abundance of porin was analyzed by western blotting. Representative cropped image of western blot is shown. Quantification was relative to the level in untreated healthy mice (C57-VHL, white bars). Results are the mean $\pm$ SEM, (n = 8 per group). The diabetes (healthy vs db/db mice) and NRG1 (saline vs NRG1) effects were investigated with a 2 x 2 ANOVA. NS: not significant.



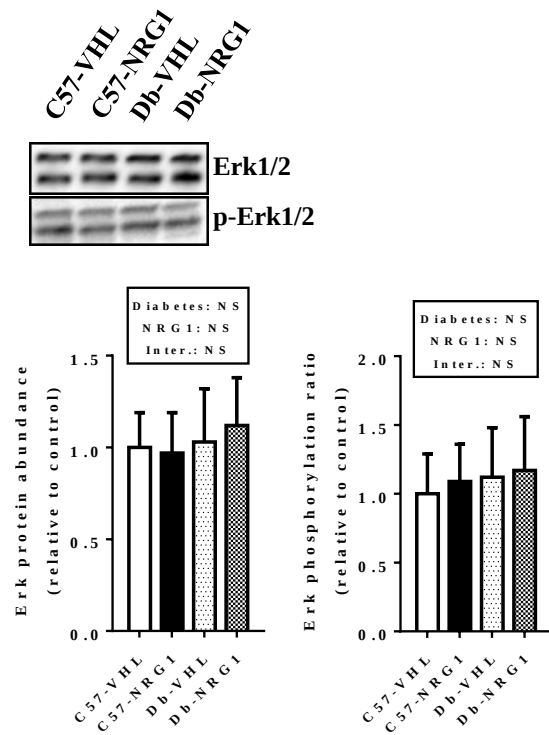
Supplementary Figure S2. The abundance of GLUT4 was analyzed by western blotting. Representative cropped image of western blot is shown. Quantification was relative to the level in untreated healthy mice (C57-VHL, white bars). Results are the mean $\pm$ SEM, (n = 8 per group). The diabetes (healthy vs db/db mice) and NRG1 (saline vs NRG1) effects were investigated with a 2 x 2 ANOVA. NS: not significant.



Supplementary Figure S3. Genes involved in the lipid oxidation pathway (*Cd36*, *Cpt1a*, *Cpt1b* and *Acadm*) were assessed by RT-qPCR. Gene expression levels were calculated using the absolute quantification method and a cDNA calibration curve, and it is shown as relative change of the expression in untreated healthy mice (C57-VHL, white bars). Results are the mean $\pm$ SEM, (n = 8 per group). The diabetes (healthy vs db/db mice) and NRG1 (saline vs NRG1) effects were investigated with a 2 x 2 ANOVA. NS: not significant.



Supplementary Figure S4. The abundance and phosphorylation ratios of Akt were analyzed by western blotting. Representative cropped image of western blot is shown. Quantification was relative to the level in untreated healthy mice (C57-VHL, white bars). Results are the mean ± SEM, (n = 8 per group). The diabetes (healthy vs db/db mice) and NRG1 (saline vs NRG1) effects were investigated with a 2 x 2 ANOVA. NS: not significant.



Supplementary Figure S5. The abundance and phosphorylation ratios of Erk1/2 were analyzed by western blotting. Representative cropped image of western blot is shown. Quantification was relative to the level in untreated healthy mice (C57-VHL, white bars). Results are the mean $\pm$ SEM, (n = 8 per group). The diabetes (healthy vs db/db mice) and NRG1 (saline vs NRG1) effects were investigated with a 2 x 2 ANOVA. NS: not significant.