Supplemental Figures

Supplemental Figure 1. Bioenergetic and Lipidomic Assessment of Wild-type and inducible Taz shRNA knockdown mice fed a diet of Doxycycline followed by subsequent removal for 2 months. (A) Functional adenine nucleotide translocase (ANT) activity driven by glutamate/malate oxidation was analyzed in cardiac mitochondria isolated from wild-type and Taz shRNA KD mice. Upon removal of doxycycline the characteristic increased glutamate stimulated ANT activity in Taz shRNA KD mice was attenuated to wild-type levels (N=3, values represent the mean $\pm$ S.E. functional ANT activity stimulated by glutamate oxidation). (B) Analysis of state 3 respiration in cardiac mitochondria was attenuated in Taz shRNA knockdown compared to wild-type mice following removal of doxycycline from the diet for 2 months (N = 4-5, values represent the mean $\pm$ S.E. oxygen consumption rate for state 3 stimulated respiration; Wild-type (black-bar) and Taz shRNA KD mice (white bar)). (C) Representative negative ion mode mass spectrum of lipid extracts from myocardium of wild-type and Taz shRNA knockdown mice treated with doxycycline and subsequently removed from doxycycline treatment for 2 months. Lipidomic analysis revealed that there was no significant difference between wild-type and Taz shRNA knockdown after 2 months of removal from doxycycline diet in regards to cardiolipin, monolysocardiolipin, or dilysocardiolipin species (representative spectrum from an n = 3 per group).

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