Supporting Information

Co-polarized [1-^{13}C]pyruvate and [1,3-$^{13}C_2$]acetoacetate Provide a Simultaneous View of Cytosolic and Mitochondrial Redox in a Single Experiment

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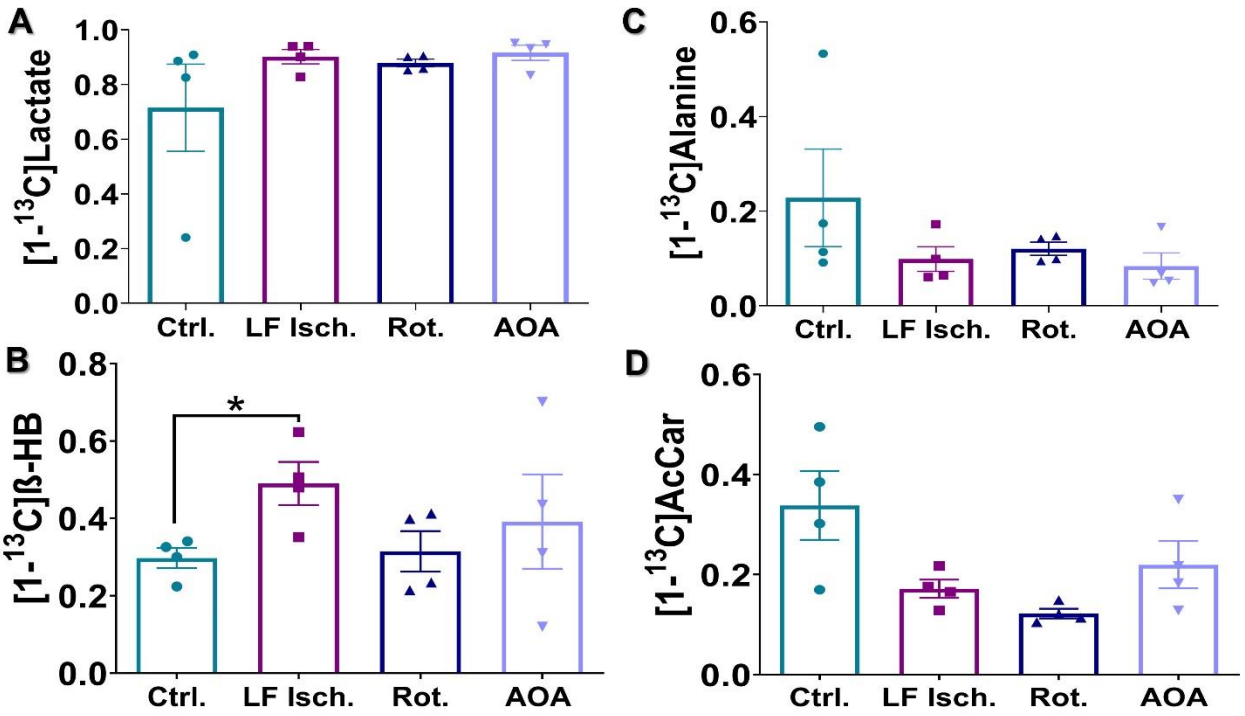

Figure S1: Normalized signals of **(A)** HP [1-^{13}C]lactate**, (B)** C-1 of HP [1,3-$^{13}C_2$]β-HB, (**C**) HP [1-^{13}C]alanine, and (**D**) HP [1-^{13}C]AcCar in the hearts following the injection of co-polarized [1-^{13}C]pyruvate and [1,3-$^{13}C_2$]AcAc. Intensities of HP [1-^{13}C]lactate and HP [1-^{13}C]alanine were normalized to total ^{13}C signal from downstream metabolites produced by [1-^{13}C]pyruvate in the same heart. C-1 of HP [1,3-$^{13}C_2$]β-HB and HP [1-^{13}C]AcCar intensities were normalized to total ^{13}C signal from downstream metabolites produced by [1,3-$^{13}C_2$]AcAc. Data are presented as the mean ± SEM (n = 4 per group) with statistical significance of differences indicated by "*" ($P < 0.05$).

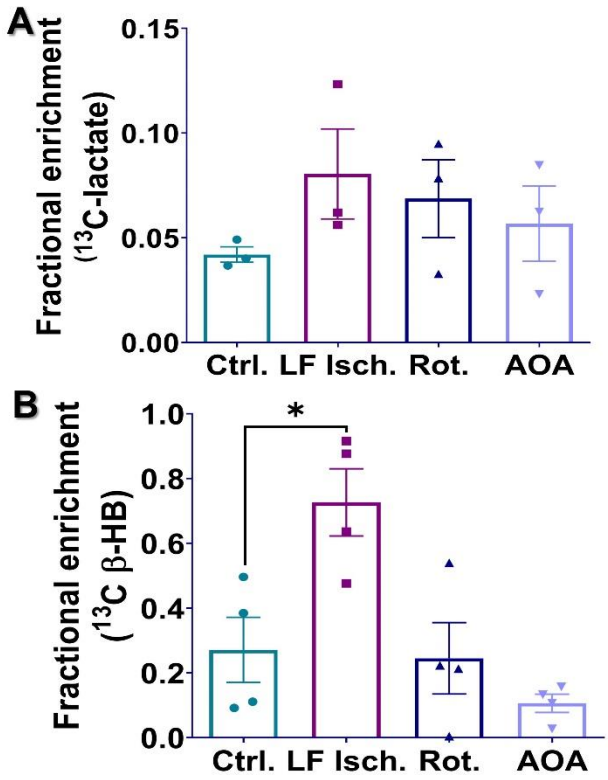

Figure S2: ^{13}C fractional enrichment of the total lactate (**A**, n = 3) and β-HB (**B**, n = 4) pools in hearts undergoing different interventions. Ctrl = control, LF Isch = low-flow ischemia, Rot = rotenone, AOA = amino oxyacetate. Data are presented as the mean ± SEM with statistical significance of differences indicated by "*" ($P < 0.05$).