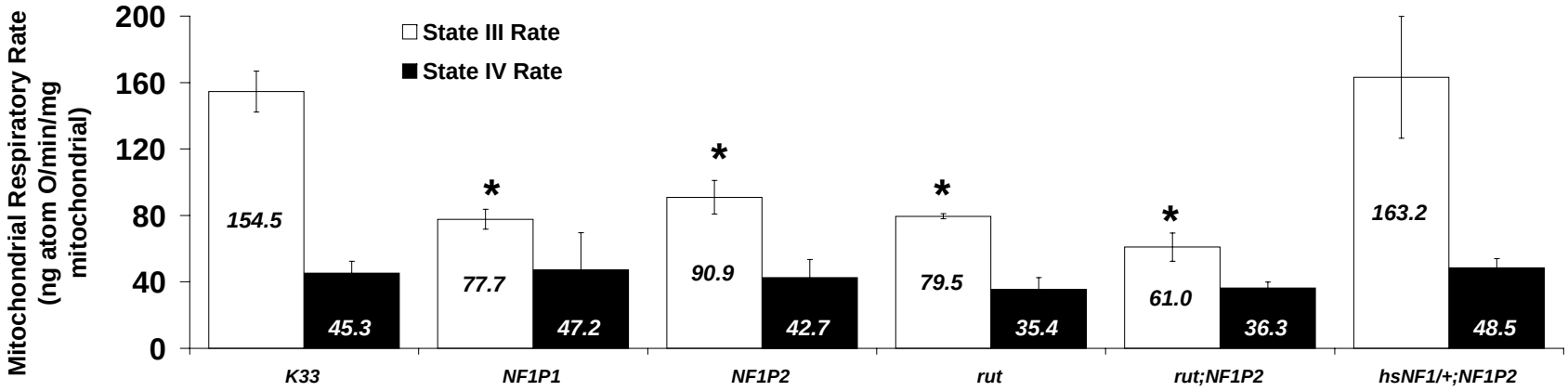

Supplementary Fig. 2. NF1/AC/cAMP signaling modulated mitochondrial respiration. ***NF1*** **or** ***rut*** **mutants reduced NADH-linked and ADP-stimulated (state III) respiration without altering ADP-independent (state IV) respiration. Expression of one copy of heat shock controlled** ***Drosophila NF1*** **gene in** ***hsNF1/+; NF1*** ^{P2} **restored normal state III rate in** ***NF1*** ^{P2} **flies (*: P < 0.05, t-test). NADH-linked respiration is driven by pyruvate and malate which reduce** NAD^+ **to NADH as they are metabolized in the mitochondria. NADH is reoxidized back to** NAD^+ **by OXPHOS complex I, n = 4, mean ± SD, total 150 flies per experiment.**