

SUPPLEMENTARY FIG. S4. Sildenafil treatment has no impact on mitochondrial ultrastructure. (A) Representative transmission electron micrograph of SSM ultrastructure and morphology in WT TA muscle. **(B)** Representative transmission electron micrograph of subsarcolemmal mitochondrial ultrastructure and morphology in GC1^{-/-} TA muscle. SSM size, cristae alignment, and gross morphology were indistinguishable between WT and GC1^{-/-} muscle. Data are representative of 20–30 micrographs from 4 WT and 3 GC1^{-/-} TA muscles. **(C)** Representative transmission electron micrograph of IFM ultrastructure and morphology in WT TA muscle. **(D)** Representative transmission electron micrograph of IFM ultrastructure and morphology in GC1^{-/-} TA muscle. IFM size, cristae alignment, and gross morphology were indistinguishable between WT and GC1^{-/-} muscle. Data are representative of 30 micrographs from 4 WT and 3 GC1^{-/-} TA muscles. Thus, increased cGMP has no impact on mitochondrial size or ultrastructure. IFM, intermyofibrillar mitochondria; SSM, subsarcolemmal mitochondria.