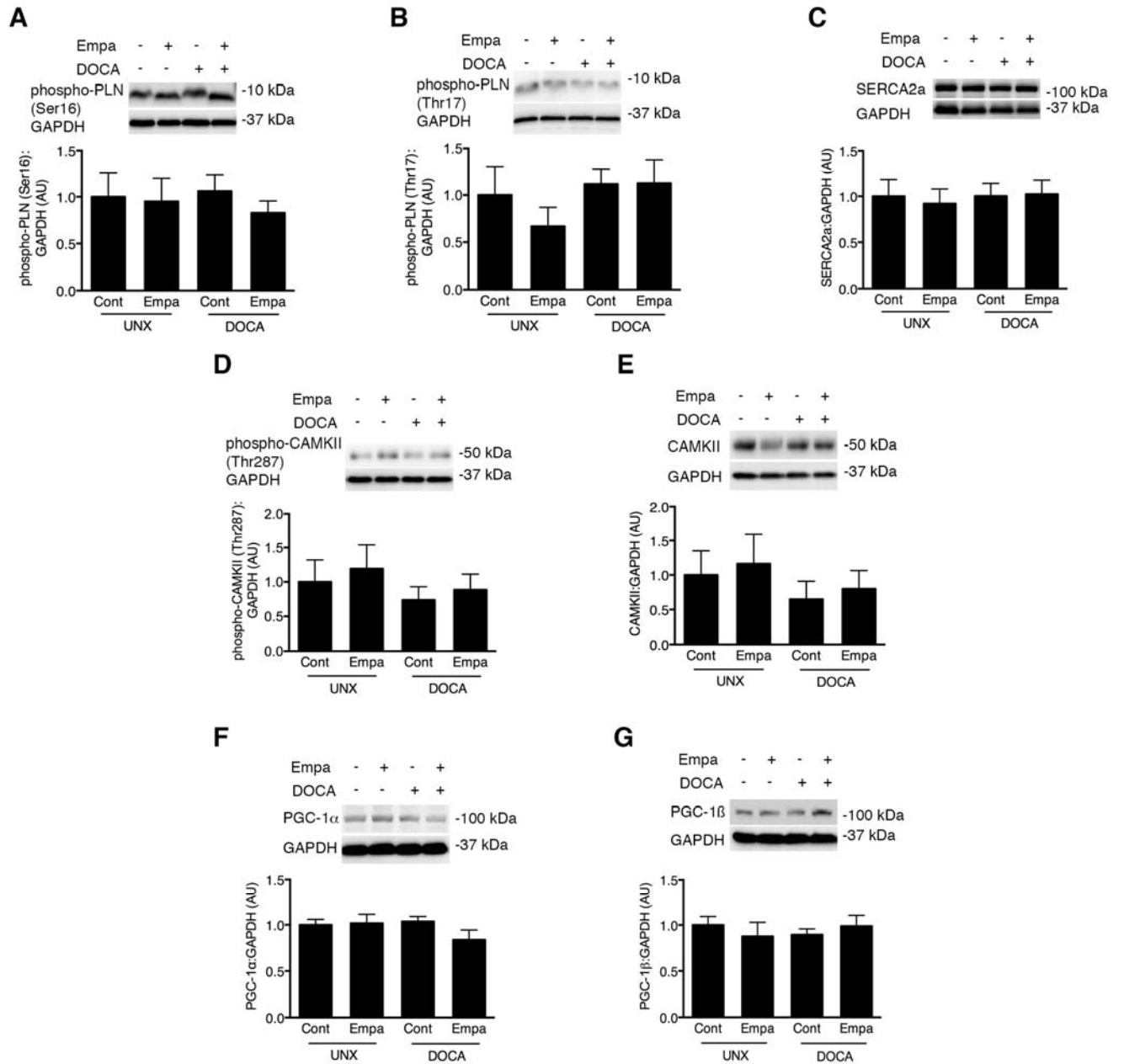


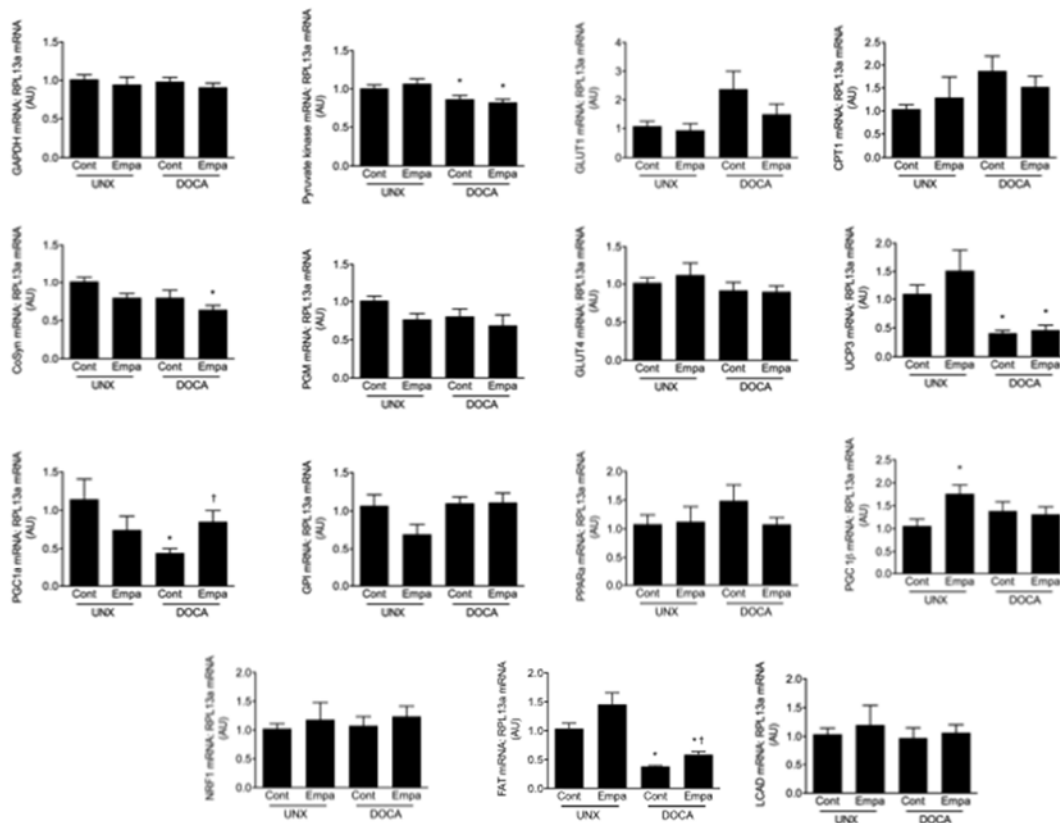
## Supplementary Figure 1:

Immunoblotting for phosphorylated and total levels of key proteins involved in cardiac hypertrophy and calcium signalling. Although there was considerable between sample heterogeneity, there were no consistent differences, with either DOCA salt or empagliflozin therapy, in the levels of any of the protein or phospho-proteins probed for. N=6 per group.



## Supplementary Figure 2:

Assessment of key metabolic genes involved in fat and glucose transport, oxidation and mitochondrial biogenesis. DOCA Salt animals demonstrated reductions in UCP3, PGC1 $\alpha$ , Fatty acid protein/ CD36 and pyruvate kinase. Empagliflozin therapy improved PGC1 $\alpha$  mRNA only. \*  $p < 0.05$  compared to UNX control animals. †  $p < 0.05$  compared to DOCA control animals. See supplementary table 1 for primers and full list of genes assessed. N= 8 for Control UNX, N=7 for UNX EMPA, N=14 for Control DOCA, N=13 for EMPA DOCA.



Primers:

<a href="#">18SrRNA-F</a>	21	AGTCCCTGCCCTTTGTACACA
<a href="#">18SrRNA-R</a>	19	CGATCCGAGGGCCTCACTA
<a href="#">Rat Glut-1 F</a>	20	CCCCAGAAGGTAATTGAGGA
<a href="#">Rat Glut 1 R</a>	20	GATTAACAAAGAGGCCACACA
<a href="#">Rat Glut 4 F</a>	20	TGGCATGGGTTTCCAGTATG
<a href="#">Rat Glut 4 R</a>	20	GGTTTCACCTCCTGCTCTAA
<a href="#">Rat Hexokinase type II F</a>	20	CACTCCAGATGGCACAGAGA
<a href="#">Rat Hexokinase type II R</a>	19	TAACCTCCGTGGGATGGAG
<a href="#">Rat GPI F</a>	18	ACTCTCCATCGCACTGCA
<a href="#">Rat GPI</a>	18	ACTGGTCATAGGGCAGCA
<a href="#">Rat PFK 1 F</a>	20	GTGGAAACCCAACTCCCTTT
<a href="#">Rat PFK 1 R</a>	20	CCCCAGAACACAACCTGAGT
<a href="#">Rat GAPDH F</a>	20	GGATGCAGGGATGATGTTCT
<a href="#">Rat GAPDH R</a>	22	GAAGGGCTCATTGACCACAGTT
<a href="#">Rat PGM F</a>	18	TGGCTGGTTTTGATGCAGA
<a href="#">Rat PGM R</a>	18	ACCCACATTTGGTCCGTA
<a href="#">Rat Pyruvate kinase F</a>	20	GGAAGGTCCTGGGAGAGAAG
<a href="#">Rat Pyruvate kinase R</a>	20	AATCTCAATGCCCAGGTCAC
<a href="#">Rat PDH E1a F</a>	20	ACAGTGCTCACCAGAGAGGA
<a href="#">Rat PDH E1a R</a>	20	CAGGCTTCTGACCATCACA
<a href="#">Rat FAT F</a>	19	GACCATCGGCGATGAGAAA
<a href="#">Rat FAT R</a>	20	CCAGGCCCAGGAGCTTTATT
<a href="#">Rat Acyl-CoA synthetase F</a>	20	AACACGTCAGTGAAGCGATG
<a href="#">Rat Acyl-CoA synthetase R</a>	20	AACACATTTGCCCTTTTAC
<a href="#">Rat CPT 1 F</a>	20	ATGTTTGACCCAAAGCAGTA
<a href="#">Rat CPT 1 R</a>	20	TCATGTAGGAAACCCCGTAT
<a href="#">Rat LCAD F</a>	21	TTTTCCGGGAGAGTGTAAGGA
<a href="#">Rat LCAD R</a>	20	CTCTGCAATGTTGATGCCAA
<a href="#">Rat PPARa F</a>	22	ACCCGAGAGAGTTCCTAAAGAA
<a href="#">Rat PPARa R</a>	20	AATGTCACTGTCATCCAGTT
<a href="#">Rat PGC1a F</a>	21	CACCAAACCCACAGAGAACAG
<a href="#">Rat PGC1a R</a>	21	GCAGTTCCAGAGAGTTCCACA
<a href="#">Rat NRF 1 F</a>	21	TTACTCTGCTGTGGCTGATGG

<a href="#">Rat NRF 1 R</a>	21	CCTCTGATGCTTGCGTCGTCT
<a href="#">Rat Uncoupling protein 3 F</a>	21	GCCGCTTGGTACTTTCCTCAT
<a href="#">Rat Uncoupling protein 3 R</a>	17	CGACCCCTGGGCAGAGA
<a href="#">Rat TFAM F</a>	21	GAAAGCACAAATCAAGAGGAC
<a href="#">Rat TFAM R</a>	21	CTGCTTTTCATCATGAGACAG
<a href="#">Rat ANT F</a>	21	TGCTCAAGTTCACAGGTTTAC
<a href="#">Rat ANT R</a>	20	CTTCTGTTTGCTGTGGAATC
<a href="#">Rat COX-1 F</a>	21	AGCAGGAATAGTAGGGACAGC
<a href="#">Rat COX-1 R</a>	21	TGAGAGAAGTAGTAGGAGGCC
<a href="#">Rat m-creatine kinase F</a>	21	CCACAACAAGTTCAAGCTGAA
<a href="#">Rat m-creatine kinase R</a>	21	AAGATCTCCTCAATCTTCTGC
<a href="#">Rat b-creatine kinase F</a>	17	GCCGCCATGCCCTTCTC
<a href="#">Rat b-creatine kinase R</a>	20	CTTAGACTTGAAGAGATTTT
<a href="#">Rat ANF F</a>	23	CCGATAGATTCTGCCCTCTTGAA
<a href="#">Rat ANF R</a>	20	CCCGAAGCAGCTTGATCTTC
<a href="#">Rat PGC1B F</a>	20	TCTCACACCCCAGTCCAGAA
<a href="#">Rat PGC1B R</a>	20	AGGCTTGTTGACATCCCGTT
<a href="#">Rat rRPL13a F</a>	20	GATGAACACCAACCCGTCTC
<a href="#">Rat rRPL13a R</a>	20	CACCATCCGCTTTTTCTTGT