



**Supplementary information, Fig. S1 Quality control of lactylation modification in normal and Ang II-induced heart failure mice.**

**a** Principal component analysis (PCA) showing the first two principal components of protein intensities, with specimens linked by centroids based on sample type. **b** Pearson's correlation analysis; each value represents the correlation coefficient between the two samples. **c** A boxplot based on relative standard deviation (RSD), with each point representing an RSD value. **d** Histogram of mass spectrometry results. **e** Protein molecular weight statistics; each bar height represents the number of proteins. **f** Peptide number statistics after enzymatic hydrolysis; each bar height represents the number of proteins. **g** Peptide length statistics; each bar height represents the number of peptides. **h** Volcano plot showing peptide mass tolerance distribution. **i** Pie chart showing protein sequence coverage distribution. **j** Protein mass and coverage distribution.