

## **Aldehyde dehydrogenase 2 activation in aged heart improves the autophagy by reducing the carbonyl modification on SIRT1**

### **Supplementary Material**

**Supplementary Table 1**

**General features of young (4 mo) and aged (22 mo) mice**

<b>Mouse group</b>	<b>Young</b>	<b>Aged</b>
<b>Body weight(BW, g)</b>	$24.2 \pm 1.5$	$32.3 \pm 0.9^*$
<b>Heart weight (HW, mg)</b>	$140 \pm 4$	$165 \pm 6^*$
<b>HW/BW (mg/g)</b>	$5.78 \pm 0.26$	$5.11 \pm 0.66$
<b>Normalized LV mass (mg/g)</b>	$2.17 \pm 0.5$	$2.25 \pm 0.3$
<b>Fractional shortening (%)</b>	$48.6 \pm 1.46$	$46.5 \pm 3.4$
<b>Heart rate (beats.min<sup>-1</sup>)</b>	$465 \pm 12$	$458 \pm 32$

Values are means  $\pm$  SEM, n=10 for both groups, \* $P < 0.05$  vs Young

**Supplementary Table 2****General features of WT and ALDH2 KO mice**

<b>Mouse group</b>	<b>WT</b>	<b>ALDH2 KO</b>
<b>Body weight (g)</b>	25.8 ± 1.2	23.5 ± 1.5
<b>Heart weight (mg)</b>	145± 9	143± 11
<b>Heart weight/body weight ratio (mg/g)</b>	5.62± 0.51	6.08 ± 0.42
<b>Liver weight (g)</b>	1.35±0.03	1.32±0.05
<b>Liver weight/body weight ratio (mg/g)</b>	51.2±2.50	56.2±3.33
<b>Kidney weight (mg)</b>	355±8	338±12
<b>Kidney weight/body weight ratio (mg/g)</b>	13.75±0.67	14.38±0.80
<b>Fractional shortening (%)</b>	47.6±1.5	42.3±2.3
<b>Heart Rate (beats.min<sup>-1</sup>)</b>	452±18	460±30

Values are means ± SEM, n=10 for each groups