Aldehyde Dehydrogenase 2 (ALDH2) Rescues Myocardial Ischemia/Reperfusion Injury: Role of Autophagy Paradox and Toxic Aldehyde

Heng Ma, Rui Guo, Lu Yu, Yingmei Zhang and Jun Ren

Center for Cardiovascular Research and Alternative Medicine, University of Wyoming,

Laramie, WY 82071, USA

Table 1: General features of WT, ALDH2 overexpression (ALDH2) and ALDH2 KO mice.

	WT	ALDH2	ALDH2 KO
Body weight (g)	27.5 ± 0.9	27.8 ± 1.2	27.4 ± 1.1
Heart weight (mg)	161 ± 8	168 ± 7	154 ± 6
Heart/weight (mg/g)	5.87 ± 0.24	6.07 ± 0.22	5.77 ± 0.41
Liver weight (g)	1.44 ± 0.07	1.43 ± 0.07	1.40 ± 0.05
Liver/body weight (mg/g)	52.5 ± 2.8	52.9± 3.9	52.4± 3.5
Kidney weight (mg)	395 ± 13	399 ± 20	386 ± 23
Kidney/body weight (mg/g)	14.5 ± 0.5	14.7 ± 1.0	14.6 ± 1.4
Wall thickness (mm)	0.87±0.06	0.85±0.02	0.87±0.03
LV diastolic diameter (mm)	2.90±0.10	2.88±0.14	2.86±0.08
LV systolic diameter (mm)	1.65±0.08	1.63±0.11	1.66±0.05

Normalized LV mass (mg/g)	2.63±0.30	2.69±0.23	2.71±0.11
Fractional Shortening (%)	42.9±1.5	45.0±1.9	41.9±1.0
Heart Rate (bpm)	445±19	451±14	458±15

Mean ± SEM, n = 11-12 mice per group, $p > 0.05$ in all data presented among the three groups.

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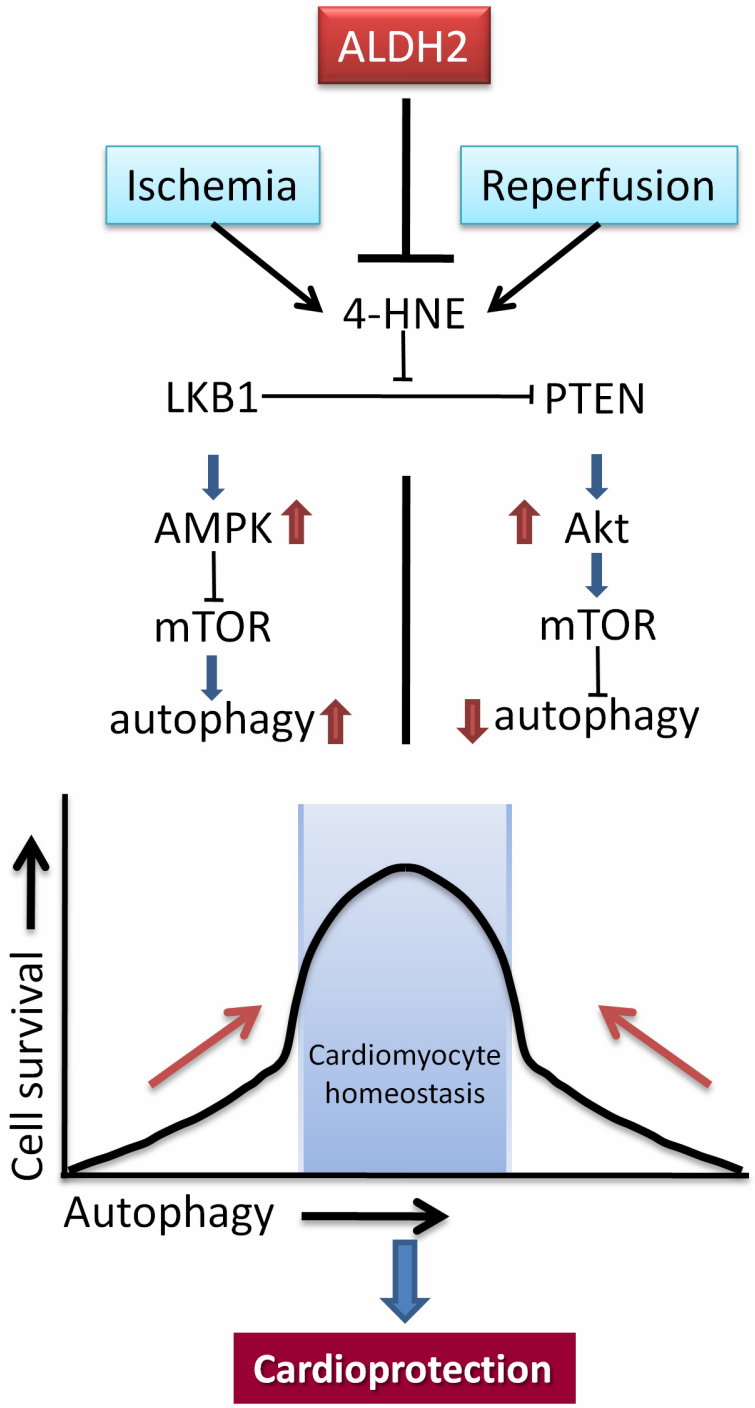

Supplemental Scheme 1: ALDH2 decreases cytotoxic aldehyde and modifies autophagy pathway in maintaining survival homeostatic response to ischemia and reperfusion injury.