

Supplementary Data

SUPPLEMENTARY FIG. S1. Effects of MAO inhibition on mitochondrial or cytosolic oxidative status. (A) Cytosolic H₂O₂ formation measured by Cyto-HyPer in isolated NRVMs treated with 0.5 μM doxorubicin for 24 h, in the presence or absence of 100 μM pargyline. Cells have been further stimulated with increasing concentrations of H₂O₂ (i.e., 1–10–100 μM) for 10 min. **p* < 0.001 versus Basal by one-way ANOVA with *post hoc* Tukey's multiple comparison test. (B) Western blot representing the efficiency of different concentrations of MAO-A siRNA (i.e., 20–40–60 pmol) compared with scramble (Scr) in NRVMs. (C) GSSG/GSH ratio measured in isolated NRVMs treated with 0.5 μM doxorubicin for 24 h, in the presence or absence of 100 μM pargyline. **p* < 0.05 versus Untreated, #*p* < 0.05 versus Doxo by one-way ANOVA with *post hoc* Tukey's multiple comparison test. (D) Total thiol oxidation status in isolated NRVMs treated with 0.5 μM doxorubicin for 24 h, in the presence or absence of 100 μM pargyline. (E) AMVMs treated with 0.5 μM doxorubicin for 24 h, in the presence or absence of 200 μM pargyline. In all conditions, cells were treated with 100 μM of H₂O₂ for 10 min, and rod-shaped AMVMs have been quantified. **p* < 0.001 versus Untreated, #*p* < 0.001 versus Doxo by one-way ANOVA with *post hoc* Tukey's multiple comparison test. (F) Western blot representing the expression level of MAO-A in NRVMs treated with or without 0.5 μM doxorubicin for 24 h. The expression level of MAO-A has been analyzed by densitometry analysis and normalized to actin. (G) Western blot representing the expression level of MAO-B in AMVMs treated with or without 0.5 μM doxorubicin for 24 h. The expression level of MAO-A has been analyzed by densitometry analysis and normalized to actin. (H) Mitochondrial H₂O₂ formation measured by Mito-HyPer in isolated NRVMs treated with 0.5 μM doxorubicin for 24 h, in the presence or absence of 100 μM pargyline. Cells have been further stimulated with 20 μM tyramine for 2 h. **p* < 0.05 versus Untreated Vehicle, #*p* < 0.001 versus Untreated Tyramine, §*p* < 0.001 versus Doxo Tyramine, §*p* < 0.001 versus Vehicle by one-way ANOVA with *post hoc* Tukey's multiple comparison test. Approximately 30 cells were analyzed per condition in each experiment, and all the experiments were performed at least three times using three different animal or cell preparations. The GSSG/GSH ratio measurement, the total thiol estimation, and Western blot analyses were performed three times using three different animal preparations. Data are expressed as mean ± SEM. Integral blots are shown in Supplementary Figure S2. MAO, monoamine oxidase; NRVM, neonatal rat ventricular myocyte; SEM, standard error of the mean.

