

Hydrogen sulfide inhibits myocardial injury induced by homocysteine in rats

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The present Fig. 6b shows that H₂S was added at early time points (i.e. 100 time/s). This was an oversight. Hcy induced a transient superoxide anion release in isolated myocardial mitochondria. However, in the early times, we found that H₂S could not be added and a curve was not observed. So, we pre-incubated mitochondria with different concentrations of H₂S, followed by the addition of Hcy. We found that pre-treatment with H₂S at 10⁻⁹ mol/L, mostly blocked superoxide anion release induced by Hcy, and treated with H₂S from 10⁻⁸ to 10⁻⁴ mol/L completely abolished superoxide anion production, that is, the tracings were not elevated and remained at baseline.

The correct Fig. 6 is given below:

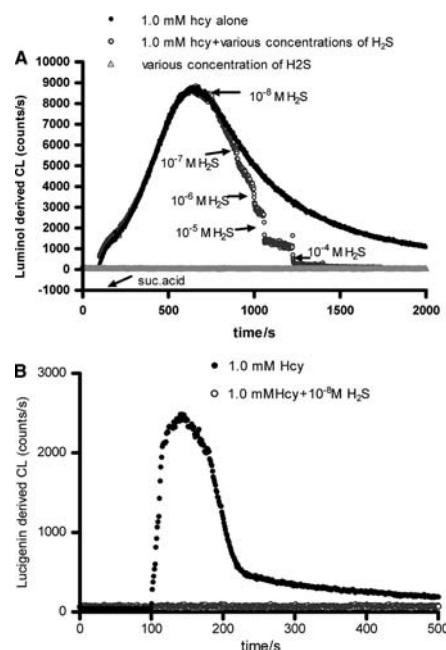


Fig. 6 Hydrogen sulfide cleaved reactive oxygen species produced by Hcy in myocardial mitochondria. **a** Myocardial mitochondria were isolated from normal rat hearts and incubated with 0.1 mmol/L Hcy for 5 min followed by H₂O₂ production triggered by succinate acid. At peak H₂O₂ production, various dosages of H₂S were added in the incubation buffer, step by step, from low to high dosage. The H₂O₂ production curve was monitored by computerized chemiluminescence machine. **b** Isolated myocardial mitochondria were incubated with 0.1 mmol/L Hcy for 5 min followed by measuring the superoxide anion production by lucigenin-derived chemiluminescence. At the peak of the curve, different concentrations of H₂S were added and the alteration in superoxide anion was recorded. An amount of 0.1 mM hypoxanthine plus 10 mU xanthine oxidase induced superoxide anion was used as a positive control

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