

## Selective blockade of $\alpha$ 2-adrenoceptor subtypes modulates contractility of rat myocardium

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### Abstract

© 2016 Springer Science+Business Media New York. The study examined the dose-dependent effects of selective antagonists of  $\alpha$ 2A/D-,  $\alpha$ 2B-, and  $\alpha$ 2C-adrenoceptors applied in concentrations of  $10^{-9}$ - $10^{-5}$  M on atrial and ventricular contractility of rat myocardium in vitro. Selective blockade of each  $\alpha$ 2-adrenoceptor subtype affected the contractile force of the atrial and ventricular strips. Various concentrations of  $\alpha$ 2A/D- and  $\alpha$ 2C-adrenoceptor antagonists produced positive inotropic effect on ventricular strips and negative effect on atrial strips.  $\alpha$ 2B-Adrenoceptor blocker in the majority of the tested concentrations produced a positive inotropic effect in both atria and ventricles.

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### Keywords

Chronotropy, Heart, Rat,  $\alpha$  -adrenoceptor 2