

Role of P2X and P2Y receptors in rat myocardial contractility during ontogeny

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Abstract

Stable agonist of P2 receptors 2-methylthio-ATP and selective antagonists of P2X and P2Y receptors PPADS and reactive blue-2 were used for evaluation of the role of P2 receptors in positive contractile reaction of atrial and ventricular myocardium in rats. PPADS significantly moderated the effects of 2-methylthio-ATP in 14-, 21-, and 56-day-old rat pups, but potentiated them in 100-day-old rats. Under conditions of reactive blue-2 treatment, the positive effect of the agonist was preserved in the atria and ventricles in all age groups and was age-dependent. © Springer Science+Business Media, Inc. 2007.

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Keywords

Contractility, Myocardial strips, Ontogenesis, P2X and P2Y receptors