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Adenosine receptors in GtoPdb v.2021.2

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Abstract

Adenosine receptors (**nomenclature as agreed by the NC-IUPHAR Subcommittee on Adenosine Receptors [110]**) are activated by the endogenous ligand adenosine (potentially inosine also at A_3 receptors). Crystal structures for the antagonist-bound [153, 313, 221, 61], agonist-bound [375, 203, 204] and G protein-bound A_{2A} adenosine receptors [49] have been described. The structures of an antagonist-bound A_1 receptor [128] and an adenosine-bound A_1 receptor-G_i complex [86] have been resolved by cryo-electronmicroscopy. Another structure of an antagonist-bound A_1 receptor obtained with X-ray crystallography has also been reported [57]. caffeine is a nonselective antagonist for adenosine receptors, while istradefylline, a selective A_{2A} receptor antagonist, is on the market for the treatment of Parkinson's disease.

Contents

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