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**Review**

## GABA<sub>B</sub> receptors in drug addiction

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**Abstract:**

Preclinical studies and clinical trials carried out within the past few years have provided a premise that  $\gamma$ -aminobutyric acid (GABA) transmission and GABA<sub>B</sub> receptors play a modulatory role in the mechanism of action of different drugs of abuse. The present review summarizes the contribution of GABA<sub>B</sub> receptors to the rewarding, locomotor and discriminative stimulus properties of drugs of abuse and their withdrawal symptoms in laboratory animals. It also reviews the current knowledge about the GABA<sub>B</sub> receptor ligands in clinical trials, with a focus on their effects on presentation of the drug-associated cues and withdrawal-induced drug craving.

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**Key words:**

addictive substances, discrimination, GABA<sub>B</sub> receptor ligands, locomotion, reward, reinstatement of seeking behavior, withdrawal, laboratory animals, clinical trials

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