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Title: A subtype-specific Neuropeptide FF receptor antagonist attenuates morphine and nicotine withdrawal syndrome in the rat

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A subtype-specific Neuropeptide FF receptor antagonist attenuates morphine
and nicotine withdrawal syndrome in the rat

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Highlights

- AC-262620 is a small-molecule, systemically active, selective antagonist of the FF1 receptor.
- Ten mg/kg i.p. AC-262620 significantly reduced naloxone-precipitated somatically expressed withdrawal signs in rats infused s.c. for seven days with 0.3 mg/kg/hr morphine sulfate.
- The same dose of AC-262620 significantly reduced subsequent spontaneous withdrawal signs 23.75 hours after termination of seven days s.c. infusion of 0.6 mg/kg/hr morphine sulfate.
- Nicotine triggers the release of endogenous opioid peptides. Additional evidence suggests that endogenous opiate mechanisms may contribute to nicotine withdrawal syndrome in the rat.
- AC-262620 significantly reduced somatically expressed withdrawal signs precipitated by 1 mg/kg s.c. of the nicotinic antagonist mecamylamine in rats infused for seven days with 9 mg/kg/day nicotine bitartrate.

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