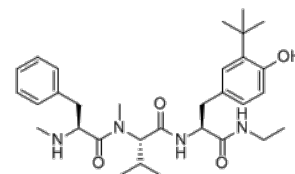


Product Name : MA-2029
Cat. No. : PC-22029
CAS No. : 287206-61-5
Molecular Formula : C₃₁H₄₆N₄O₄
Molecular Weight : 538.73
Target : Motilin Receptor
Solubility : 10 mM in DMSO



CAS: 287206-61-5

Biological Activity

MA-2029 (MA2029) is a potent, selective and competitive motilin receptor antagonist with pA₂ value of 9.17, displaces [¹²⁵I]motilin with IC₅₀ of 2.74 nM.

MA-2029 (1 μM) has no effects on resting tone or spontaneous contractions and no significant effect on the contractile response to acetylcholine or substance P.

MA-2029 also displaces [¹²⁵I] motilin bound to cell membranes of HEK 293 cells expressing human motilin receptors with IC₅₀ and pK_i values of 4.9 nM and 8.39, respectively.

MA-2029 shows either very low or no affinity for any of the 24 receptors and 7 ion channels.

MA-2029 (3 to 30 mg/kg, oral) dose-dependently inhibited colonic contractions induced by motilin (3 μg/kg, i.v.) in conscious rabbits.

MA-2029 (0.3 to 3 mg/kg) also inhibited abdominal muscle contractions (an index of the visceral pain) induced by intravenous infusion of motilin (3 μg/kg/h) during colorectal distension in conscious rabbits.

References

Sudo H, et al. Eur J Pharmacol. 2008 Mar 10;581(3):296-305.

Ozaki K, et al. Eur J Pharmacol. 2009 Aug 1;615(1-3):185-92.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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