

AdipoRon

Catalog No: tcsc2238



Available Sizes

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

924416-43-3

Formula:

$C_{27}H_{28}N_2O_3$

Pathway:

GPCR/G Protein

Target:

Adiponectin Receptor

Purity / Grade:

>98%

Solubility:

DMSO : ≥ 44 mg/mL (102.68 mM)

Observed Molecular Weight:

428.52

Product Description

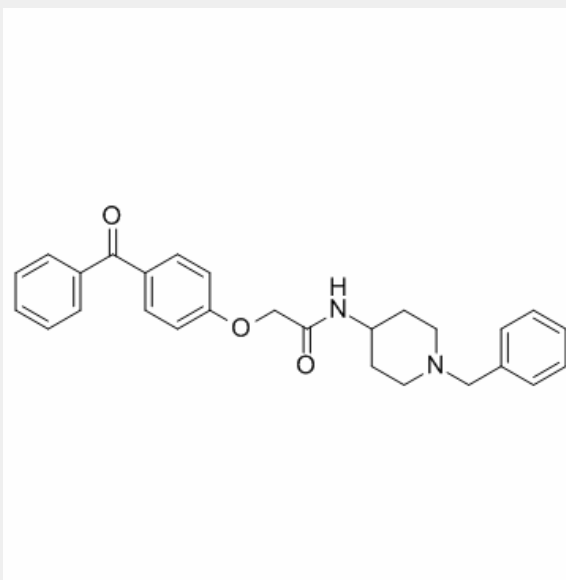
AdipoRon is an orally active and specific **AdipoR** agonist, binding to AdipoR1 and AdipoR2, with **K_d**s of 1.8 and 3.1 μ M, respectively.

IC50 & Target: Kd: 1.8 μ M (AdipoR1), 3.1 μ M (AdipoR2)^[1]

In Vitro:

AdipoRon is an orally active and specific AdipoR agonist, binds to AdipoR1 and AdipoR2, with K_d s of 1.8 and 3.1 μ M. AdipoRon (50 nM-50 μ M) increases AMPK phosphorylation via AdipoR1^[1]. AdipoRon (50 μ M) dose-dependently attenuates the expression of TNF- α and TGF- β 1 in the L02 cells. AdipoRon exhibits significant and dosage-dependent growth suppression on macrophages^[2]. AdipoRon treatment significantly improves cardiac functional recovery after reperfusion, and inhibits post-MI apoptosis^[3]. AdipoRon exerts vasodilation by mechanisms distinct to adiponectin and induces vasorelaxation without a marked decrease in VSMC $[Ca^{2+}]_i$ ^[4].

In Vivo: AdipoRon (50 mg/kg, i.v.) causes significant phosphorylation of AMPK in skeletal muscle and liver of wild-type mice but not AdipoR1^{-/-} AdipoR2^{-/-} double-knockout mice^[1]. AdipoRon (0.02, 0.1, and 0.5 mg/kg, i.g.) alleviates D-GalN induced hepatotoxicity in mice, and prevents hepatic architecture distortion against D-GalN challenge. The hepatoprotective potential of AdipoRon is particularly evident in higher dosages (0.1 and 0.5 mg/kg)^[2]. Enhanced cardiomyocyte apoptosis in APN-deficient mice is rescued by AdipoRon (50 mg/kg, p.o.) administration. Antiapoptotic effect of AdipoRon is attenuated but not lost in AMPK-DN mice^[3].



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