Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

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 $\mathbf{K_d}$s of 1.8 and 3.1 μM, respectively.

IC50 & Target: Kd: 1.8 μM (AdipoR1), 3.1 μM (AdipoR2)[1]

In Vitro:

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AdipoRon is an orally active and specific AdipoR agonist, binds to AdipoR1 and AdipoR2, with K_ds of 1.8 and 3.1 μM. AdipoRon (50 nM-50 μM) increases AMPK phosphorylation via AdipoR1[1]. AdipoRon (50 μM) dose-dependently attenuates the expression of TNF-α and TGF-β1 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.) cuases 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].