

Product Data Sheet

AdipoRon

Cat. No.:	B1879
CAS No.:	924416-43-3
Formula:	C27H28N2O3
M.Wt:	428.52
Synonyms:	
Target:	GPCR/G protein
Pathway:	Adiponectin Receptor
Storage:	Store at -20°C



Solvent & Solubility

≥21.45 mg/mL in DMSO; insoluble in EtOH; insoluble in H2O

In Vitro

Preparing Stock Solutions	Solvent		Mass		
	Concentration		1mg	5mg	10mg
	1 mM		2.3336 mL	11.6681 mL	23.3361 mL
	5 mM		0.4667 mL	2.3336 mL	4.6672 mL
	10 mM		0.2334 mL	1.1668 mL	2.3336 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary

AdipoR1 and AdipoR2 agonist, first orally active

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line:	L02 hepatocytes, RAW264.7 macrophages
Preparation method:	The solubility of this compound in DMSO is >21.5mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	5–50 μM

	Applications:	AdipoRon (5–50 μ M) pretreatment dose-dependently attenuated the expression of TNF- α and TGF- β 1 in L02 cell line. AdipoRon exhibited significant and dosage-dependent growth suppression on macrophages.
In Vivo	Animal experiment	
	Animal models:	Adult male WT mice and APN knockout (APN ^{-/-}) mice
	Dosage form:	Oral administration, 40 mg/kg
	Applications:	Oral administration of AdipoRon significantly improved cardiac functional recovery in wild-type (WT), adiponectin knockout (APN ^{-/-}), and cardiomyocyte-specific AMPK α 2 mutant transgenic mice (AMPK-DN). Oral AdipoRon administration significantly attenuated postischemic cardiac apoptosis. AdipoRon rescued the enhanced cardiomyocyte apoptosis in APN-deficient mice. AdipoRon significantly reduced NADPH oxidase expression and inhibited superoxide production in ischemic/reperfused heart.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

- [1]. Wang Y, Wan Y, Ye G, et al. Hepatoprotective effects of AdipoRon against d-galactosamine-induced liver injury in mice[J]. European Journal of Pharmaceutical Sciences, 2016, 93: 123-131.
- [2]. Zhang Y, Zhao J, Li R, et al. AdipoRon, the first orally active adiponectin receptor activator, attenuates postischemic myocardial apoptosis through both AMPK-mediated and AMPK-independent signalings[J]. American Journal of Physiology-Endocrinology and Metabolism, 2015, 309(3): E275-E282.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX^{BIO} products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.



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