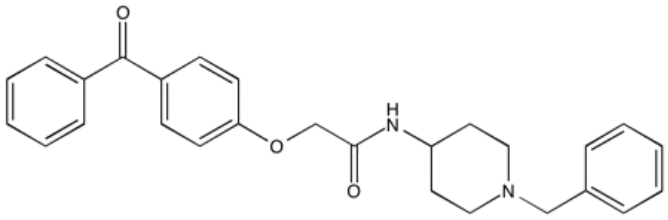
Catalog # 10-1483

AdipoRon

CAS# 924416-43-3

2-(4-Benzylphenoxy)-N-(1-benzylpiperidin-4-yl)acetamide

Lot # S101151



A novel potent and selective adiponectin (AdipoR1 and AdipoR2) receptor agonist, K_d=1.8 and 3.1 μM respectively[1]. Displayed similar effects to adiponectin in muscle and liver such as activation of PPARα and AMPK signaling pathways. It also reversed insulin resistance and glucose intolerance in mice on a high-fat diet. It ameliorated diabetes in a genetically obese mouse model and prolonged the shortened lifespan of db/db mice on a high-fat diet[1]. Attenuates PDGF-induced VSMC proliferation via inhibition of mTOR signaling in an AMPK independent manner.[2] Active *in vivo*.

1) Okada-Iwabu *et al*. (2013), *A small-molecule AdipoR agonist for type 2 diabetes and short life obesity*; Nature, **503** 493

2) Fairaq *et al.* (2017) *AdipoRon, an adiponectin receptor agonist, attenuates PDGF-induced VSMC proliferation through inhibition of mTOR signaling independent of AMPK: Implications toward suppression of neointimal hyperplasia*; Pharmacol. Res. **119** 289

PHYSICAL DATA

Molecular Weight:	428.54
Molecular Formula:	$C_{27}H_{28}N_2O_3$
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 40 mg/ml) or Ethanol (up to 20 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied at room temperature for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 2 months.

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