

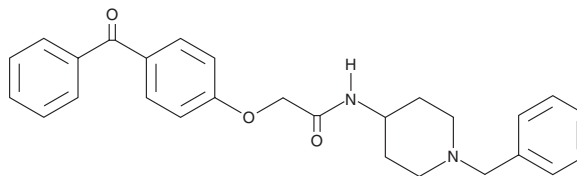
# PRODUCT INFORMATION



## AdipoRon

Item No. 15941

**CAS Registry No.:** 924416-43-3  
**Formal Name:** 2-(4-benzoyloxyphenyl)-N-[1-(phenylmethyl)-4-piperidinyl]-acetamide  
**MF:** C<sub>27</sub>H<sub>28</sub>N<sub>2</sub>O<sub>3</sub>  
**FW:** 428.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 283 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

AdipoRon is supplied as a crystalline solid. A stock solution may be made by dissolving the AdipoRon in the solvent of choice. AdipoRon is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of AdipoRon in these solvents is approximately 15, 20, and 10 mg/ml, respectively.

AdipoRon is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, AdipoRon should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. AdipoRon has a solubility of approximately 0.25 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Adiponectin expressed by adipocytes exerts antidiabetic effects by binding to adiponectin receptor (AdipoR)1, which activates AMPK pathways, and AdipoR2, which activates PPARα pathways. AdipoRon is an orally active small molecule AdipoR agonist that binds AdipoR1 and AdipoR2 with K<sub>D</sub> values of 1.8 and 3.1 μM, respectively.<sup>1</sup> At 50 mg/kg, it acts similarly to adiponectin, activating AMPK and PPARα pathways and reducing insulin resistance and glucose intolerance in wild type mice fed a high-fat diet and in genetically obese *db/db* mice.<sup>1</sup>

### Reference

1. Okada-Iwabu, M., Yamauchi, T., Iwabu, M., *et al.* A small-molecule AdipoR agonist for type 2 diabetes and short life in obesity. *Nature* **503(7477)**, 493-499 (2013).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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