



Catalog Number:	MC11038	Product Type:	Small Molecule
Bio-Activity:	Adiponectin agonist	CAS #:	924416-43-3
Research Categories:	Diabetes, obesity, liver disease, neurodegeneration	Chemical Name:	2-(4-Benzylphenoxy)-N-(1-benzylpiperidin-4-yl)acetamide
Solubility:	Soluble in DMSO (up to 40 mg/ml) or in Ethanol (up to 20 mg/ml).	Molecular Formula:	C27H28N2O3
Purity:	> 98%	Molecular Weight:	428.54
Format:	Powder	Ship Temp:	Ambient
Storage:	Room Temperature		

Application Notes

Description/Data:

A novel potent and selective adiponectin (AdipoR1 and AdipoR2) receptor agonist, $K_d=1.8$ and $3.1 \mu M$ respectively¹. Displayed similar effects to adiponectin in muscle and liver such as activation of PPAR α 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]. Active in vivo.

References:

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

FOR RESEARCH USE ONLY

NEUROMICS' REAGENTS ARE FOR IN VITRO AND CERTAIN NON-HUMAN IN VIVO EXPERIMENTAL USE ONLY AND NOT INTENDED FOR USE IN ANY HUMAN CLINICAL INVESTIGATION, DIAGNOSIS, PROGNOSIS, OR TREATMENT. THE ABOVE ANALYSES ARE MERELY TYPICAL GUIDES. THEY ARE NOT TO BE CONSTRUED AS BEING SPECIFICATIONS. ALL OF THE ABOVE INFORMATION IS, TO THE BEST OF OUR KNOWLEDGE, TRUE AND ACCURATE. HOWEVER, SINCE THE CONDITIONS OF USE ARE BEYOND OUR CONTROL, ALL RECOMMENDATIONS OR SUGGESTIONS ARE MADE WITHOUT GUARANTEE, EXPRESS OR IMPLIED, ON OUR PART. WE DISCLAIM ALL LIABILITY IN CONNECTION WITH THE USE OF THE INFORMATION CONTAINED HEREIN OR OTHERWISE, AND ALL SUCH RISKS ARE ASSUMED BY THE USER. WE FURTHER EXPRESSLY DISCLAIM ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.-V2/08/2012