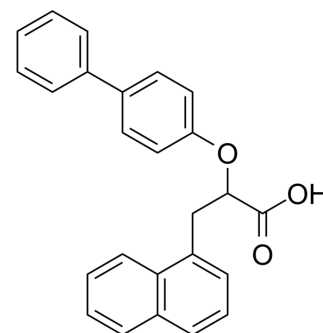


## PPAR $\alpha$ / $\gamma$ agonist 2

Cat. No.:	HY-148922
CAS No.:	2213365-56-9
Molecular Formula:	C <sub>25</sub> H <sub>20</sub> O <sub>3</sub>
Molecular Weight:	368.42
Target:	PPAR
Pathway:	Cell Cycle/DNA Damage; Vitamin D Related/Nuclear Receptor
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	PPAR $\alpha$ / $\gamma$ agonist 2 is an orally active PPAR $\alpha$ full agonist and PPAR $\gamma$ partial agonist. PPAR $\alpha$ / $\gamma$ agonist 2 activates PPAR $\alpha$ and PPAR $\gamma$ with EC <sub>50</sub> values of 0.95 $\mu$ M and 0.91 $\mu$ M respectively. PPAR $\alpha$ / $\gamma$ agonist 2 is also a PTP1B inhibitor. PPAR $\alpha$ / $\gamma$ agonist 2 is an anti-diabetic agent <sup>[1]</sup> .	
<b>IC<sub>50</sub> &amp; Target</b>	PPAR $\alpha$ 0.95 $\mu$ M (EC <sub>50</sub> )	PPAR $\gamma$ 0.91 $\mu$ M (EC <sub>50</sub> )
<b>In Vitro</b>	PPAR $\alpha$ / $\gamma$ agonist 2 (Compound 10) effectively inhibits PTP1B with an IC <sub>50</sub> of 13.2 $\mu$ M (kinetic assay) <sup>[1]</sup> . PPAR $\alpha$ / $\gamma$ agonist 2 (25 $\mu$ M, 30 min) enhances the uptake of glucose in an insulin-independent mechanism in C2C12 cells, and is more efficient than UK5099 (HY-15475) <sup>[1]</sup> . PPAR $\alpha$ / $\gamma$ agonist 2 (25 $\mu$ M, 30 min) decreases mitochondrial membrane potential in C2C12 cells <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
<b>In Vivo</b>	PPAR $\alpha$ / $\gamma$ agonist 2 (Compound 10) (25 and 50 mg/kg, p.o.) decreases blood glucose level and lipid content in STZ-induced diabetic mice <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	STZ-induced diabetic mice <sup>[1]</sup>
	Dosage:	25 and 50 mg/kg
	Administration:	p.o.
	Result:	Reduced the levels of TC, HDL, LDL-C, VLDL-C, and TG. Brought diabetes-induced hyperlipidemia back to normal.

### REFERENCES

[1]. Laghezza A, et al. A New Antidiabetic Agent Showing Short- and Long-Term Effects Due to Peroxisome Proliferator-Activated Receptor Alpha/Gamma Dual Agonism and Mitochondrial Pyruvate Carrier Inhibition. J Med Chem. 2023 Feb 15.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA