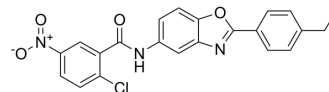


## BAY-4931

<b>Cat. No.:</b>	HY-148352		
<b>CAS No.:</b>	423150-91-8		
<b>Molecular Formula:</b>	C <sub>22</sub> H <sub>16</sub> ClN <sub>3</sub> O <sub>4</sub>		
<b>Molecular Weight:</b>	421.83		
<b>Target:</b>	PPAR		
<b>Pathway:</b>	Cell Cycle/DNA Damage; Vitamin D Related/Nuclear Receptor		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 125 mg/mL (296.33 mM; ultrasonic and warming and heat to 70°C)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	2.3706 mL	11.8531 mL	23.7062 mL
5 mM	0.4741 mL	2.3706 mL	4.7412 mL
10 mM	0.2371 mL	1.1853 mL	2.3706 mL

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

### BIOLOGICAL ACTIVITY

#### Description

BAY-4931 is a potent, covalent and selective PPAR $\gamma$  inverse-agonist with an IC<sub>50</sub> of 0.17 nM<sup>[1]</sup>.

#### IC<sub>50</sub> & Target

PPAR- $\gamma$ 0.17 nM (IC <sub>50</sub> , RT112-FABP4-NLucP cellular reporter assay)	mouse PPAR $\gamma$ 0.14 nM (IC <sub>50</sub> , GAL4-NHR-LBD one hybrid reporter assay)	hPPAR $\gamma$ 0.40 nM (IC <sub>50</sub> , GAL4-NHR-LBD one hybrid reporter assay)
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#### In Vitro

BAY-4931 (0-10  $\mu$ M; 7 days) inhibits UM-UC-9 proliferation with an IC<sub>50</sub> of 3.4 nM<sup>[1]</sup>.

BAY-4931 only inhibits CYP2C8 in CYP inhibition test<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Proliferation Assay<sup>[1]</sup>

Cell Line: UM-UC-9 cells

Concentration: 0-10  $\mu$ M

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Incubation Time:	7 days
Result:	Inhibited proliferation with an IC <sub>50</sub> of 3.4 nM.

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## REFERENCES

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[1]. Orsi DL, et al. Discovery and Structure-Based Design of Potent Covalent PPAR $\gamma$  Inverse-Agonists BAY-4931 and BAY-0069. J Med Chem. 2022 Nov 10;65(21):14843-14863.

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

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