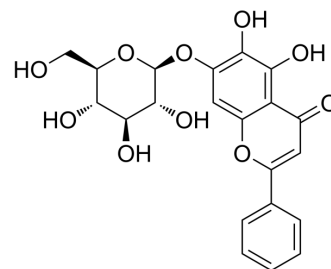


## Oroxin A

<b>Cat. No.:</b>	HY-N2025												
<b>CAS No.:</b>	57396-78-8												
<b>Molecular Formula:</b>	C <sub>21</sub> H <sub>20</sub> O <sub>10</sub>												
<b>Molecular Weight:</b>	432.38												
<b>Target:</b>	Glucosidase; PPAR												
<b>Pathway:</b>	Metabolic Enzyme/Protease; Cell Cycle/DNA Damage; Vitamin D Related/Nuclear Receptor												
<b>Storage:</b>	<table border="0"> <tr> <td>Powder</td> <td>-20°C</td> <td>3 years</td> </tr> <tr> <td></td> <td>4°C</td> <td>2 years</td> </tr> <tr> <td>In solvent</td> <td>-80°C</td> <td>6 months</td> </tr> <tr> <td></td> <td>-20°C</td> <td>1 month</td> </tr> </table>	Powder	-20°C	3 years		4°C	2 years	In solvent	-80°C	6 months		-20°C	1 month
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In solvent	-80°C	6 months											
	-20°C	1 month											



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 125 mg/mL (289.10 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM	2.3128 mL	11.5639 mL	23.1278 mL
		5 mM	0.4626 mL	2.3128 mL	4.6256 mL
		10 mM	0.2313 mL	1.1564 mL	2.3128 mL
Please refer to the solubility information to select the appropriate solvent.					
<b>In Vivo</b>	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 2.08 mg/mL (4.81 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (4.81 mM); Clear solution</li> </ol>				

### BIOLOGICAL ACTIVITY

<b>Description</b>	Oroxin A is the major component of an ethanol-water <i>Oroxylum indicum</i> (L.) Kurz (Bignoniaceae) seed extract (OISE). Oroxin A acts as a partial PPAR $\gamma$ agonist that can activate PPAR $\gamma$ transcriptional activation. Oroxin A activates PPAR $\gamma$ by docking into the PPAR $\gamma$ protein ligand-binding domain. Oroxin A also exhibits an inhibitory activity against $\alpha$ -glucosidase and an antioxidant capacity <sup>[1]</sup> . Oroxin A exerts anti-breast cancer effects by inducing ER stress-mediated senescence <sup>[2]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	PPAR $\gamma$
<b>In Vitro</b>	Oroxin A (0.5- 100 $\mu$ M; 24 hours) significantly increases the PPAR $\gamma$ transcription level and exhibits the strongest activation with 50 $\mu$ M in HEK-293t cells <sup>[1]</sup> .

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

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## REFERENCES

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- [1]. Sun W, et al. Oroxin A from *Oroxylum indicum* prevents the progression from prediabetes to diabetes in streptozotocin and high-fat diet induced mice. *Phytomedicine*. 2018 Jan 1;38:24-34.
- [2]. He J, et al. Oroxin A inhibits breast cancer cell growth by inducing robust endoplasmic reticulum stress and senescence. *Anticancer Drugs*. 2016 Mar;27(3):204-15.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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