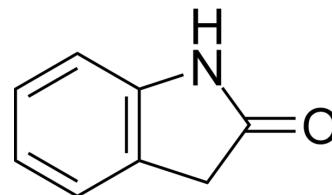


## Oxindole

<b>Cat. No.:</b>	HY-Y0061		
<b>CAS No.:</b>	59-48-3		
<b>Molecular Formula:</b>	C <sub>8</sub> H <sub>7</sub> NO		
<b>Molecular Weight:</b>	133.15		
<b>Target:</b>	HIV; Endogenous Metabolite		
<b>Pathway:</b>	Anti-infection; Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 50 mg/mL (375.52 mM; ultrasonic and warming and heat to 80°C)					
		Solvent Concentration	Mass	1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM		7.5103 mL	37.5516 mL	75.1033 mL
		5 mM		1.5021 mL	7.5103 mL	15.0207 mL
10 mM			0.7510 mL	3.7552 mL	7.5103 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: ≥ 2.5 mg/mL (18.78 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (18.78 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.5 mg/mL (18.78 mM); Clear solution</li> </ol>					

### BIOLOGICAL ACTIVITY

<b>Description</b>	Oxindole (Indolin-2-one) is an aromatic heterocyclic building block. 2-indolinone derivatives have become lead compounds in the research of kinase inhibitors.
<b>IC<sub>50</sub> &amp; Target</b>	Human Endogenous Metabolite
<b>In Vitro</b>	Oxindole (Indolin-2-one) is a bicyclic structure consisting of a benzene ring fused to 2-pyrrolidone. Substituted indolinones can be referred as 'privileged structures' owing to their excellent binding affinity for many receptors and to the number of

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approved drugs containing this scaffold<sup>[1]</sup>. Oxindole has been found in tissues and fluids of mammals as well as natural products produced by a range of plants, bacteria and invertebrates. 2-indolinone derivatives possess diverse range of pharmacological activities including anti-cancer, anti-HIV, anti-diabetic, antibacterial, antioxidant, kinase inhibitory, AChE inhibitory, anti-leishmanial, b3 adrenergic receptor agonistic, phosphatase inhibitory, analgesic, spermicidal, vasopressin antagonists, progesterone antagonists, neuroprotection, NMDA blocker and sleep inducing activities<sup>[2]</sup>.  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## CUSTOMER VALIDATION

- Amino Acids. 2022 Jul 15.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

- [1]. Leoni A, et al. 2-Indolinone a versatile scaffold for treatment of cancer: a patent review (2008-2014). *Expert Opin Ther Pat.* 2016;26(2):149-73.
- [2]. Kaur M, et al. Oxindole: A chemical prism carrying plethora of therapeutic benefits. *Eur J Med Chem.* 2016 Nov 10;123:858-894.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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