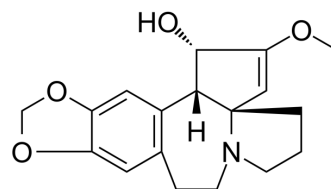


## Cephalotaxine

<b>Cat. No.:</b>	HY-N0838		
<b>CAS No.:</b>	24316-19-6		
<b>Molecular Formula:</b>	C <sub>18</sub> H <sub>21</sub> NO <sub>4</sub>		
<b>Molecular Weight:</b>	315.36		
<b>Target:</b>	Influenza Virus		
<b>Pathway:</b>	Anti-infection		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 25 mg/mL (79.27 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	<b>Preparing Stock Solutions</b>	1 mM	3.1710 mL	15.8549 mL	31.7098 mL
		5 mM	0.6342 mL	3.1710 mL	6.3420 mL
10 mM		0.3171 mL	1.5855 mL	3.1710 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 (7.93 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 (7.93 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% corn oil Solubility: ≥ 2.5 mg/mL (7.93 mM); Clear solution</li> </ol>				

### BIOLOGICAL ACTIVITY

<b>Description</b>	Cephalotaxen ((-)-Cephalotaxine) is an alkaloid that can be isolated from <i>Cephalotaxus fortunei</i> , with antileukemic and antiviral activities. Cephalotaxen has anti-ZIKV (Zika virus) activity <sup>[1][2][3]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	ZIKV <sup>[3]</sup>
<b>In Vitro</b>	Cephalotaxine inhibits Zika infection by impeding viral replication and stability <sup>[3]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

- [1]. Wang DZ, et al. Studies on the alkaloids of Cephalotaxus. IX. Semi-synthesis of cephalotaxine esters and their anti-leukemic activity Yao Xue Xue Bao. 1992;27(3):178-84.
- [2]. Efferth T, et al. Molecular modes of action of cephalotaxine and homoharringtonine from the coniferous tree Cephalotaxus hainanensis in human tumor cell lines. Naunyn Schmiedebergs Arch Pharmacol. 2003 Jan;367(1):56-67.
- [3]. Zheng-Zong Lai, et al. Cephalotaxine inhibits Zika infection by impeding viral replication and stability. Biochem Biophys Res Commun. 2020 Feb 19; 522(4): 1052–1058.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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