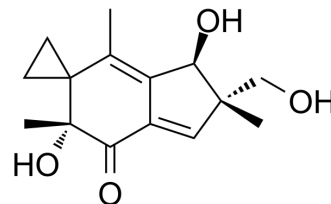


## Illudin S

Cat. No.:	HY-125098		
CAS No.:	1149-99-1		
Molecular Formula:	C <sub>15</sub> H <sub>20</sub> O <sub>4</sub>		
Molecular Weight:	264.32		
Target:	DNA Alkylator/Crosslinker; Apoptosis		
Pathway:	Cell Cycle/DNA Damage; Apoptosis		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

In Vitro	DMSO : 50 mg/mL (189.16 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	3.7833 mL	18.9165 mL	37.8329 mL
		5 mM	0.7567 mL	3.7833 mL	7.5666 mL
10 mM		0.3783 mL	1.8916 mL	3.7833 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (9.46 mM); Clear solution				
	2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (9.46 mM); Clear solution				

### BIOLOGICAL ACTIVITY

Description	Illudin S, a cytotoxic Illudin, is a natural sesquiterpene with strong anti-tumour and antiviral activities. Illudin S has genotoxic activities. Illudin S blocks the G1-S phase interface of the cell cycle in human leukemia cells <sup>[1][2][3][4]</sup> .	
In Vitro	Illudin S (0-0.26 nM; 24-72 hours) shows cytotoxicity in human fibroblasts <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Viability Assay <sup>[2]</sup>	
	Cell Line:	Human fibroblasts

Concentration:	0-0.26 nM
Incubation Time:	24 hours, 72 hours
Result:	Decreased cell survival.

## REFERENCES

- [1]. Hansruedi Glatt, et al. Sulfotransferase-independent genotoxicity of illudin S and its acylfulvene derivatives in bacterial and mammalian cells. *Arch Toxicol* . 2014 Jan;88(1):161-9.
- [2]. Nicolaas G J Jaspers, et al. Anti-tumour compounds illudin S and Irofulven induce DNA lesions ignored by global repair and exclusively processed by transcription- and replication-coupled repair pathways. *DNA Repair (Amst)*. 2002 Dec 5;1(12):1027-38.
- [3]. Illudin S, the sole antiviral compound in mature fruiting bodies of *Omphalotus illudens*
- [4]. M J Kelner, et al. Preclinical evaluation of illudins as anticancer agents. *Cancer Res*. 1987 Jun 15;47(12):3186-9.

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

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