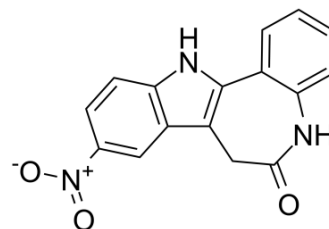


Alsterpaullone

Cat. No.:	HY-108359		
CAS No.:	237430-03-4		
Molecular Formula:	C ₁₆ H ₁₁ N ₃ O ₃		
Molecular Weight:	293.28		
Target:	CDK; GSK-3		
Pathway:	Cell Cycle/DNA Damage; PI3K/Akt/mTOR; Stem Cell/Wnt		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description	Alsterpaullone (9-Nitropauullone) is a potent CDK inhibitor, with IC ₅₀ s of 35 nM, 15 nM, 200 nM and 40 nM for CDK1/cyclin B, CDK2/cyclin A, CDK2/cyclin E and CDK5/p35, respectively. Alsterpaullone also competes with ATP for binding to GSK-3alpha/GSK-3beta with IC ₅₀ s of both 4 nM. Alsterpaullone has antitumor activity, and possesses potential for the study in neurodegenerative and proliferative disorders ^[1] .			
IC₅₀ & Target	Cdk1/cyclin B	cdk2/cyclin A	CDK2/Cyc E	CDK5/p35
	35 nM (IC ₅₀)	15 nM (IC ₅₀)	200 nM (IC ₅₀)	40 nM (IC ₅₀)
IC₅₀ & Target	GSK-3α	GSK-3β		
	4 (IC ₅₀)	4 nM (IC ₅₀)		

REFERENCES

- [1]. Leost M, et al. Paullones are potent inhibitors of glycogen synthase kinase-3beta and cyclin-dependent kinase 5/p25. *Eur J Biochem.* 2000 Oct;267(19):5983-94.
- [2]. Lahusen T, et al. Alsterpaullone, a novel cyclin-dependent kinase inhibitor, induces apoptosis by activation of caspase-9 due to perturbation in mitochondrial membrane potential. *Mol Carcinog.* 2003 Apr;36(4):183-94.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA