



LKT Laboratories, Inc.

Alsterpaullone

Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lctlabs.com
Web: lctlabs.com

Product Information

Product ID A4577

CAS No. 237430-03-4

Chemical Name

Synonym 9-Nitro-7,12-dihydroindolo-[3,2-d][1]benzazepin-6(5)-one

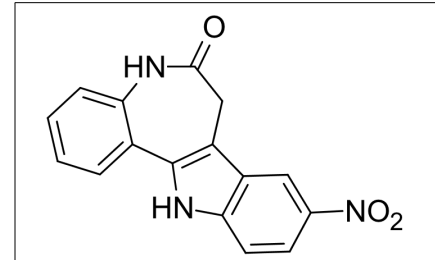
Formula $C_{16}H_{11}N_3O_3$

Formula Wt. 293.28

Melting Point

Purity $\geq 98\%$

Solubility Soluble in DMSO.



Bulk quantities available upon request

Product ID	Size
A4577	1 mg
A4577	5 mg

Store Temp 4° C

Ship Temp Ambient

Description

Alsterpaullone exhibits anticancer, anti-angiogenic, antiviral, and neuroprotective activities. Alsterpaullone inhibits cyclin-dependent kinases (CDKs), inducing G2/M phase cell cycle arrest and apoptosis in leukemia cells. Additionally, alsterpaullone inhibits glycogen synthase kinase 3 (GSK-3), inducing Wnt signaling; in ticks, this results in anti-fertility potential, decreasing egg hatching activity. Alsterpaullone also inhibits HIV-1 replication and proliferation. In ex vivo models of Alzheimer's disease, this compound protects against neuronal death and decreases phosphorylation of tau protein.

References Cui C, Wang Y, Wang Y, et al. Alsterpaullone, a Cyclin-Dependent Kinase Inhibitor, Mediated Toxicity in HeLa Cells through Apoptosis-Inducing Effect. *J Anal Methods Chem.* 2013;2013:602091. PMID: 23577282.

Windsor PJ, Leys SP. Wnt signaling and induction in the sponge aquiferous system: evidence for an ancient origin of the organizer. *Evol Dev.* 2010 Sep-Oct;12(5):484-93. PMID: 20883217.

Zahler S, Liebl J, Fürst R, et al. Anti-angiogenic potential of small molecular inhibitors of cyclin dependent kinases in vitro. *Angiogenesis.* 2010 Sep;13(3):239-49. PMID: 20706783.

Fabres A, De Andrade CP, Guizzo M, et al. Effect of GSK-3 activity, enzymatic inhibition and gene silencing by RNAi on tick oviposition and egg hatching. *Parasitology.* 2010 Sep;137(10):1537-46. PMID: 20500916.

Guendel I, Agbottah ET, Kehn-Hall K, et al. Inhibition of human immunodeficiency virus type-1 by cdk inhibitors. *AIDS Res Ther.* 2010 Mar 24;7(1):7. PMID: 20334651.

Selenica ML, Jensen HS, Larsen AK, et al. Efficacy of small-molecule glycogen synthase kinase-3 inhibitors in the postnatal rat model of tau hyperphosphorylation. *Br J Pharmacol.* 2007 Nov;152(6):959-79. PMID: 17906685.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.