



LKT Laboratories, Inc.

(R)-CR8

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Product Information

Product ID C6800

CAS No. 294646-77-8

Chemical Name 2-(R)-(1-Ethyl-2-hydroxyethylamino)-6-(4-(2-pyridyl)benzyl)-9-isopropylpurine

Synonym

Formula C₂₄H₂₉N₇O

Formula Wt. 431.54

Melting Point

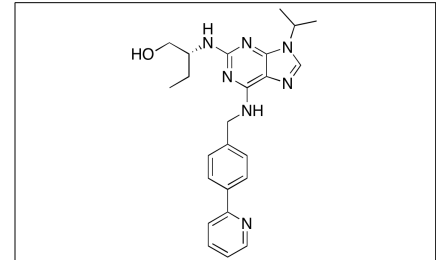
Purity ≥98%

Solubility Soluble in DMSO or 100% ethanol

Store Temp -20° C

Ship Temp Ambient

Description (R)-CR8 is an analog of roscovitine that inhibits cyclin-dependent kinases (CDKs) 1/2/3/5/7/9; it displays anticancer and neuroprotective activities. (R)-CR8 induces apoptosis and downregulates expression of Mcl-1 in neuroblastoma cells. In chronic myelogenous leukemia (CML) cells, (R)-CR8 inhibits cell cycle progression. In animal models of spinal cord injury, this compound decreases neurodegeneration, cognitive decline, and microglial activation. CR8 also decreases sensorimotor deficits, cognitive deficits, and lesion volume by limiting cell cycle activation in animal models of traumatic brain injury.



Bulk quantities available upon request

Product ID	Size
C6800	1 mg
C6800	5 mg

References Troadec S, Blairvacq M, Oumata N, et al. Antitumoral effects of cyclin-dependent kinases inhibitors CR8 and MR4 on chronic myeloid leukemia cell lines. *J Biomed Sci.* 2015 Jul 17;22:57. PMID: 26184865.

Wu J, Zhao Z, Sabirzhanov B, et al. Spinal cord injury causes brain inflammation associated with cognitive and affective changes: role of cell cycle pathways. *J Neurosci.* 2014 Aug 13;34(33):10989-1006. PMID: 25122899.

Kabadi SV, Stoica BA, Loane DJ, et al. CR8, a novel inhibitor of CDK, limits microglial activation, astrogliosis, neuronal loss, and neurologic dysfunction after experimental traumatic brain injury. *J Cereb Blood Flow Metab.* 2014 Mar;34(3):502-13. PMID: 24398934.

Bettayeb K, Baunbæk D, Delehouze C, et al. CDK Inhibitors Roscovitine and CR8 Trigger Mcl-1 Down-Regulation and Apoptotic Cell Death in Neuroblastoma Cells. *Genes Cancer.* 2010 Apr;1(4):369-80. PMID: 21779453.

Bettayeb K, Oumata N, Echalièr A, et al. CR8, a potent and selective, roscovitine-derived inhibitor of cyclin-dependent kinases. *Oncogene.* 2008 Oct 2;27(44):5797-807. PMID: 18574471.

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