



LKT Laboratories, Inc.

(S)-CR8

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Product Information

Product ID C6801

CAS No. 1084893-56-0

Chemical Name (2S)-2-[(9-Isopropyl-6-[[4-(2-pyridinyl)benzyl]amino]-9H-purin-2-yl)amino]-1-butanol

Synonym 2-(S)-(1-Ethyl-2-hydroxyethylamino)-6-(4-(2-pyridyl)benzyl)-9-isopropylpurine

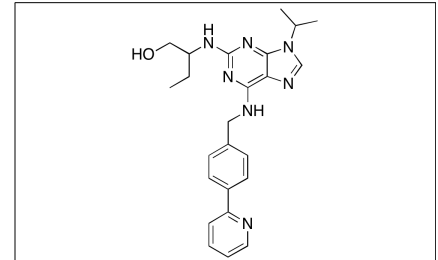
Formula C₂₄H₂₉N₇O

Formula Wt. 431.54

Melting Point

Purity ≥99%

Solubility Soluble in DMSO or ethanol



Bulk quantities available upon request

Product ID	Size
C6801	1 mg
C6801	5 mg

Store Temp -20° C

Ship Temp Ambient

Description (S)-CR8 is an analog of roscovitine that inhibits cyclin-dependent kinases (CDKs) 1/2/3/5/7/9; it displays anticancer, nephroprotective, and neuroprotective activities. CR8 induces apoptosis in various cancer cells by suppressing 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. In animal models of polycystic kidney disease, (S)-CR8 decreases renal and hepatic cystogenesis and attenuates kidney function decline by suppressing cell cycle progression and decreasing apoptosis.

References 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.

Bukanov NO, Moreno SE, Natoli TA, et al. CDK inhibitors R-roscovitine and S-CR8 effectively block renal and hepatic cystogenesis in an orthologous model of ADPKD. *Cell Cycle.* 2012 Nov 1;11(21):4040-6. PMID: 23032260.

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