

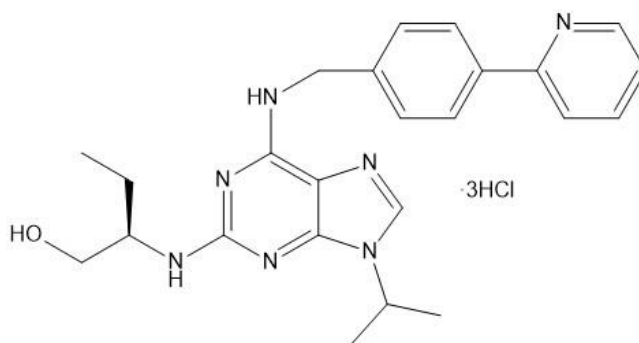
Catalog # 10-5507

CR8 3HCl (R)

CAS# 294646-77-8

(R)-2-((9-Isopropyl-6-((4-(pyridin-2-yl)benzyl)amino)-9H-purin-2-yl)amino)butan-1-ol

Lot # X109373



Second generation analog of roscovitine which inhibits cyclin-dependent kinases with increased potency, Cdk1/cyclin B, Cdk2/cyclin A, Cdk2/cyclin E, Cdk5, p25, and Cdk9/cyclin T, IC_{50} s=0.09, 0.072, 0.041, 0.11 and 0.18 μ M respectively.^{1,2} Acts as a molecular glue degrader that depletes cyclin K.³ CR8 displays neuroprotective effects in various models including traumatic brain injury.⁴

- 1) Bettayeb *et al.* (2008), *C8, a potent and selective, roscovitine-derived inhibitor of cyclin-dependent kinases*; *Oncogene*, **27** 5797
- 2) Bettayeb *et al.* (2010), *CDK Inhibitors Roscovitine and CR8 Trigger Mcl-1 Down-Regulation and Apoptotic Cell Death in Neuroblastoma Cells*; *Genes Cancer*, **1** 369
- 3) Slabiki *et al.* (2020), *The CDK inhibitor CR8 acts as a molecular glue degrader that depletes cyclin K*; *Nature*, **585** 293
- 4) Aubrecht *et al.* (2018), *Comparing effects of CDK inhibitor and E2F1/2 ablation on neuronal cell death pathways in vitro and after traumatic brain injury*; *Cell Death Dis.*, **9** 1121

PHYSICAL DATA

Molecular Weight:	540.91
Molecular Formula:	C ₂₄ H ₂₉ N ₇ O · 3HCl
Purity:	98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 30 mg/ml)
Physical Description:	White or off-white solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 1 month.

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