



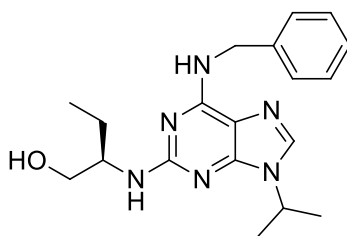
Catalog # 10-1332

Roscovitine

CAS# 186692-46-6

(R)-2-((6-(Benzylamino)-9-isopropyl-9H-purin-2-yl)amino)butan-1-ol

Lot # X102469



Potent and selective inhibitor of cyclin-dependent kinases displaying higher potency and selectivity compared to olomoucine. $p34^{cdc2}$ $IC_{50} = 0.2 \mu M$. Also inhibits $p33^{cdk2}$ and $p33^{cdk5}$.¹ Anti-angiogenic.² Prevents $PPAR\gamma$ S273 phosphorylation, promoting browning of white adipose tissue.³ Enhances peripheral nerve regrowth.⁴

- 1) Meijer et al. (1997), *Biochemical and cellular effects of roscovitine, a potent and selective inhibitor of the cyclin-dependent kinases cdc2, cdk2 and cdk5*; Eur. J. Biochem., **243** 527
- 2) Liebl et al. (2011), *Anti-angiogenic effects of purine inhibitors of cyclin dependent kinases*; Angiogenesis, **14** 281
- 3) Wang et al. (2016) *Browning of White Adipose tissue with Roscovitine Induces a Distinct Population of UCP1+ Adipocytes*; Cell Metab. **24** 835
- 4) Law et al. (2016) *Enhancement of Peripheral Nerve Regrowth by the Purine Nucleoside Analog and Cell Cycle Inhibitor, Roscovitine*; Front. Cell. Neurosci. **10** 238

PHYSICAL DATA

Molecular Weight:	354.46
Molecular Formula:	C ₁₉ H ₂₆ N ₆ O
Purity:	99% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 10 mg/ml with warming) or Ethanol (up to 10 mg/ml)
Physical Description:	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 or ethanol may be stored at -20°C for up to 3 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

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