Cat No. 34-K14

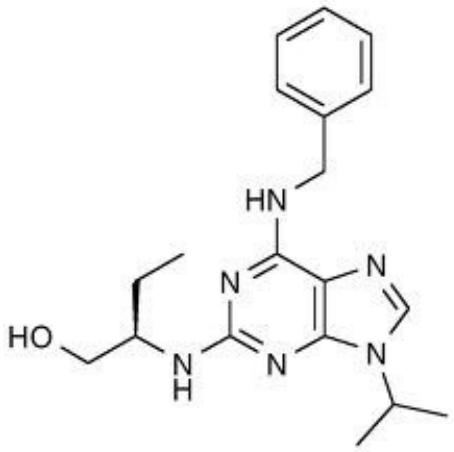
Roscovitine

1mg

For research purposes only

Roscovitine, also known as Seliciclib or CYC202, is a potent and reversible inhibitor of select cyclin-dependent kinases (CDKs), CDK1, CDK2, and CDK5. It has less sensitivity towards related kinases including ERK1,2. This molecule competes for the binding site of ATP in the catalytic cleft. Treatment of cultured cells with roscovitine can cause cell cycle arrest or apoptosis.

TECHNICAL INFORMATION



Other Names: 6-Benzylamino-2[(R)-(1'-ethyl-2'-hydroxyethylamino)]-9-isopropylpurine

Chemical Formula: $C_{19}H_{26}N_6O$

CAS Number: 186692-46-6

PubChem Substance ID: 160355

Molecular Weight: 354.45

Purity: >99%

Appearance: Crystalline solid

Solubility: DMSO

IC_{50} : CDK2: .1µm, CDK5: .16µm

STORAGE AND HANDLING

Storage: Store at 4°C and protected from light. Following reconstitution, store aliquots at -20°C.

Stability: Stock solutions stable at -20°C for up to 2 years.

Shipping Conditions: Shipped at room temperature.

PRODUCT USE

Soluble in DMSO.

REFERENCES

1. Adler, M., et al (2012). Reversal of BoNT/A-mediated inhibition of muscle paralysis by 3, 4-diaminopyridine and Roscovitine in mouse phrenic nerve-hemidiaphragm preparations. Neurochem Int. 10:1016.
2. Molinsky, J., et al (2012). Roscovitine sensitizes leukemia and lymphoma cells to TRAIL-induced apoptosis. Leuk Lymphoma. 10:3109.
3. Hoogendijk, A.J., et al (2012). R-Roscovitine reduces lung inflammation induced by lipoteichoic acid and streptococcus pneumonia. Mole Med. 10:2119.