

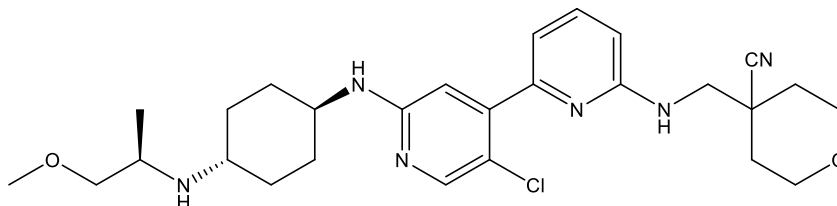
Catalog # 10-4858

NVP-2

CAS# 1263373-43-8

4-[[[6-[5-Chloro-2-[[4-[(2*R*)-1-methoxypropan-2-yl]amino]cyclohexyl]amino]pyridin-4-yl]pyridin-2-yl]amino]methyl]oxane-4-carbonitrile

Lot # FBS4068



NVP-2 is a highly selective and potent ($IC_{50} = 0.514$ nM) inhibitor of cyclin dependent kinase 9 (CDK9).¹ It inhibited proliferation of MOLT4 cells ($IC_{50} = 9$ nM). Treatment of cells with NVP-2 resulted in profound downregulation of core regulatory circuitry genes. It has also been shown to be a potent inhibitor of CDK10 ($IC_{50} = 29$ nM; this study gives an IC_{50} of 6 nM for CDK9).² NVP-2 acted synergistically with orlistat to inhibit acute myeloid leukemia cells (IC_{50} S: Kasumi-1 cells 7.58 nM; U937 cells 8.99 nM).³

- 1) Olson *et al.* (2018), *Pharmacological perturbation of CDK9 using selective CDK9 inhibition or degradation*; Nat. Chem. Biol. **14** 163
- 2) Robert *et al.* (2020); *Development of a CDK10/CycM in vitro Kinase Screening Assay and Identification of First Small-Molecule Inhibitors*, Front. Chem., **8** 147
- 3) Zhu *et al.* (2025), *NVP-2, in combination with Orlistat, represents a promising therapeutic strategy for acute myeloid leukemia*; Cancer Biol. Ther. **26** 2450859

PHYSICAL DATA

Molecular Weight:	513.08
Molecular Formula:	C ₂₇ H ₃₇ ClN ₆ O ₂
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (>25 mg/ml); ethanol (>25 mg/ml)
Physical Description:	Off-white to beige solid
Storage and Stability:	Store as supplied 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 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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