

NVP-2, CDK9 inhibitor

Catalog	Unit
TBI4858-5MG	5 mg
TBI4858-25MG	25 mg

Product Details

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

Molecular Formula: C₂₇H₃₇ClN₆O₂

Formula Weight: 513.1

CAS Number: 1263373-43-8

Purity: >98%

Formulation: Powder

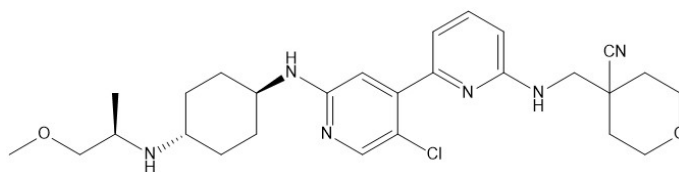
Solubility: Soluble in DMSO (>25 mg/ml); ethanol (>25 mg/ml)

Storage: -20°C

Stability: ≥ 2 years

Applications

CDK9 inhibitor



Functions

Highly selective and potent (IC₅₀ = 0.514 nM) inhibitor of cyclin dependent kinase 9 (CDK9). It inhibited proliferation of MOLT4 cells (IC₅₀ = 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 (IC₅₀ = 29 nM; this study gives an IC₅₀ of 6 nM for CDK9). NVP-2 acted synergistically with orlistat to inhibit acute myeloid leukemia cells (IC₅₀s: Kasumi-1 cells 7.58 nM; U937 cells 8.99 nM).

Application Procedures

First dissolved in Soluble in DMSO (>25 mg/ml) or ethanol (>25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

For research use only.