



Cyclopamine (11-Deoxojervine)

Catalog No: tcsc0633

Available Sizes
Size: 5mg
Size: 10mg
Size: 50mg
Size: 100mg
Specifications
CAS No: 4449-51-8
Formula: C ₂₇ H ₄₁ NO ₂
Pathway: Stem Cell/Wnt
Target: Hedgehog
Purity / Grade: >98%
Solubility: DMSO : 5 mg/mL (12.15 mM; Need ultrasonic and warming); Ethanol : ≥ 10 mg/mL (24.29 mM)
Alternative Names: 11-Deoxojervine
Observed Molecular Weight: 411.62



Product Description

Cyclopamine is a $\mathbf{Hedgehog}$ (\mathbf{Hh}) pathway antagonist with $\mathbf{IC_{50}}$ of 46 nM in the Hh cell assay.

IC50 & Target: IC50: 46 nM (Hedgehog, in Hh cell assay)[1]

In Vitro: Treatment with small molecule Hh inhibitors such as HhAntag and the natural product Cyclopamine, both binding to Smo, induces tumor remission in a genetic mouse model of medulloblastoma^[1]. Cyclopamine is a Hedgehog (Hh) pathway antagonist. Cyclopamine suppresses cell growth. Cyclopamine (3 μ M) suppression of Hh pathway activity and growth in digestive tract tumour cell lines correlates with expression of PTCHmRNA^[2]. Cyclopamine is a steroidal alkaloid that inhibits Hh signalling through direct interaction with Smo^[3].

In Vivo: Cyclopamine causes durable regression of xenograft tumors. Tumors in Cyclopamine-treated animals, regress completely by 12 days^[2]. Cyclopamine (1.2 mg) treatment blocks tumour formation of human pancreatic adenocarcinoma cells after transplantation into nude mice^[3].

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