



Tipifarnib (Zarnestra) Kinase Inhibitor

E1KS1453

Kinase Inhibitor Name: Tipifarnib (Zarnestra)

Catalog Number: E1KS1453

Quantity: 10mg

1. PHYSICAL AND CHEMICAL PROPERTIES

M.Wt: 489.4

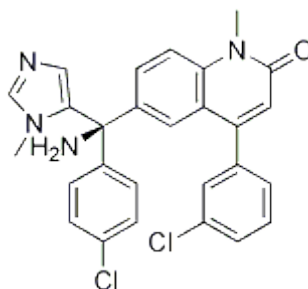
Formula: $C_{27}H_{22}Cl_2N_4O$

Solubility: DMSO ≥ 14 mg/mL Water < 1 mg/mL Ethanol ≥ 6 mg/mL

Stability: 2 years -20°C Powder
1 week -4°C in DMSO
1 month -80°C in DMSO

CAS No.: 192185-72-1

Molecular Structure:



2. Biological Activity

Tipifarnib (Zarnestra) is a farnesyltransferase inhibitor with an IC₅₀ of 0.6 nM. It is a nonpeptidomimetic quinolinone with potential antineoplastic activity. It binds to and inhibits the enzyme farnesyl protein transferase, an enzyme involved in protein processing (farnesylation) for signal transduction. By inhibiting the farnesylation of proteins, it prevents the activation of Ras oncogenes, inhibits cell growth, induces apoptosis, and inhibits angiogenesis. ^{[1][2][3]}

3. References:

<http://en.wikipedia.org/wiki/Tipifarnib> <http://en.wikipedia.org/wiki/Tipifarnib> ;

<http://www.cancer.gov/drugdictionary/?CdrID=42626>

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In vitro effects of the farnesyltransferase inhibitor tipifarnib on myelodysplastic syndrome progenitors.

Kotsianidis I et al. Acta Haematol. 2008;120(1):51-6.

The pharmacological and toxicological properties of this product have not been fully investigated.

Exercise caution in use and handling. This product must not be used in humans.

For Research Use Only