



NSC319726

Catalog No: tcsc3542

Available Sizes
Size: 5mg
Size: 10mg
Size: 50mg
Specifications
CAS No: 71555-25-4
Formula: C ₁₁ H ₁₄ N ₄ S
Pathway: Apoptosis
Target: MDM-2/p53
Purity / Grade: >98%
Solubility: DMSO: 27.5 mg/mL (117.36 mM; Need ultrasonic and warming)
Alternative Names: ZMC1
Observed Molecular Weight: 234.32
Product Description





NSC319726 is a mutant p53R175 reactivator; inhibits growth of fibroblasts expressing the p53R175 mutation (IC50 = 8 nM); shows no inhibition for p53 wild-type cells.

IC50 value: 8 nM [1]

Target: mutant p53R175 reactivator

in vitro: For NSC319726, the effect was even greater as the IC50

for the 175 mutant was 8 nM while the IC50 of the WT was not reached. NSC319726 did not induce WT p53 protein levels or transcriptional activity as common cytotoxic agents such as etoposide do in vitro. NSC319726 exhibited a much higher sensitivity for the MEF-p53R172H/R172H cell line as compared to the p53+/+ and p53-/- controls. NSC319726 treatment of a MEF cell line derived from p53R172H/R172H mice resulted in a

loss of PAB240 immunoflouresence staining.

in vivo: At a dose of 1mg/kg, tumor growth of the H460 (p53+/+) and MDAMB468 (p53R273W) xenografts was not inhibited relative to the vehicle control whereas tumor growth was significantly inhibited in the TOV112D (p53R175H) xenografts. When we lowered the dose ten-fold to 0.1 mg/kg in the TOV112D mice, we observed only a small difference in tumor growth inhibition demonstrating both a dosage effect of the drug and a larger therapeutic window. Taken together, these findings provide in vivo evidence for allele specific p53 mutant reactivation.

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!