

Product Data Sheet

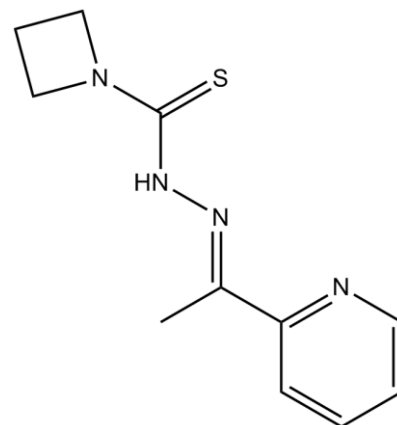
Chemical Properties

Product Name: NSC 319726

Cas No.: 71555-25-4

M.Wt: 234.32

Formula: C₁₁H₁₄N₄S



Chemical Name: N-[(Z)-1-pyridin-2-ylethylideneamino]azetidine-1-carbothioamide

Canonical SMILES: CC(=NNC(=S)N1CCC1)C2=CC=CC=N2

Solubility: Soluble in DMSO > 10 mM

Storage: Store at -20°C

General tips: For obtaining a higher solubility, please warm the tube at 37° C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20° C for several months.

Shopping Condition: Evaluation sample solution : ship with blue ice
All other available size: ship with RT, or blue ice upon request

Biological Activity

Targets : p53

Pathways: Apoptosis >> p53

Description:

NSC 319726 is a reactivator of mutant p53 with IC₅₀ value of 8nM [1]. NSC 319726 belongs to the thiosemicarbazone family. In a mouse fibroblast cell line Balb/c 3T3, NSC 319726 shows greater inhibition of cell growth in cells expressing mutant p53 than in WT p53 control. NSC 319726 is also nontoxic to WI38 human fibroblasts (p53 WT). In three different ovarian carcinoma cell lines (TOV112D (p53R175H), OVCAR3 (p53R248W) and SKOV3 (p53-/-)),

treatment of NSC 319726 results in an induction of apoptosis in the p53R175 mutant. NSC 319726 restores p53 function through inducing a conformation change of mutant p53 to a “WT-like” structure which can be recognized by the WT specific antibody. The inhibition of cell growth caused by NSC 319726 is also found in the TOV112D (p53R175H) xenografts when the dose of NSC 319726 is 1mg/kg. Furthermore, it is shown that zinc ion chelation and ROS changes are important for the apoptosis induced by NSC319726 [1].

Reference:

[1] Yu X, Vazquez A, Levine AJ, Carpizo DR. Allele-specific p53 mutant reactivation. *Cancer Cell*. 2012 May 15;21(5):614-25.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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