

Catalog Number: CM20758

产品信息

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CM20758

CAS号:
581073-80-5

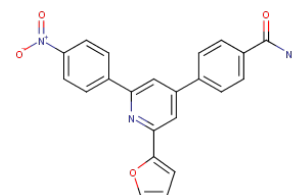
分子式:
C₂₂H₁₅N₃O₄

主要靶点:
Autophagy|c-Myc

主要通路:
自噬|细胞周期

分子量:
385.37

溶解度:
DMSO:100 mg/mL (259.49
mM), Sonification is
recommended., H₂O:<0.1 mg/mL
(insoluble)



靶点活性

MYC:(kd)6.5±1.0 nM

体外活性

KJ Pyr 9 specifically inhibits MYC-induced oncogenic transformation in cell culture; it has no or only weak effects on the oncogenic activity of several unrelated oncoproteins. KJ Pyr 9 interferes with MYC-MAX complex formation in the cell, as shown in a protein fragment complementation assay. KJ Pyr 9 against three cell lines is tested known to be dependent on increased MYC activity: NCI-H460, MDA-MB-231, and SUM-159PT. KJ Pyr 9 preferentially interferes with the proliferation of MYC-overexpressing human and avian cells and specifically reduces the MYC-driven transcriptional signature. The proliferation of all cell lines tested is inhibited (IC₅₀s: between 5 and 10 μM). The proliferation of Burkitt lymphoma cell lines, which show constitutively high expression of c-MYC, is more sensitive to KJ Pyr 9 (IC₅₀s: between 1 and 2.5 μM).

体内活性

Nude mice receive a xenograft of MDA-MB-231 cells suspended in Matrigel and injected s.c. into the left and right flanks to test the in vivo effectiveness of KJ Pyr 9 (KJ-Pyr-9). The tumor volume in the KJ Pyr 9-treated animals has not increased significantly, by day 31. The tumors are extracted and weighed, at the conclusion of the experiment. When the tumors have reached an average volume of 100 mm³, mice are treated daily with 10 mg/kg KJ Pyr 9 or vehicle control by i.p. injection for 31 d. Inhibition of tumor growth by KJ Pyr 9 is noted after 8 d of treatment. The weight measurements are in agreement with the volume determinations and confirmed the ability of KJ Pyr 9 to halt tumor growth.

描述

KJ Pyr 9 is an MYC inhibitor (Kd: 6.5 nM in vitro assay).

储存

Powder: -20°C for 3 years | In solvent: -80°C for 2 years