

Product Name : CX-5461

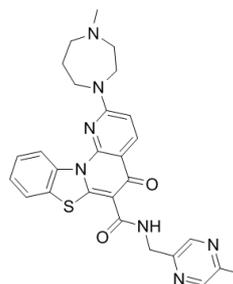
Synonyms : CX 5461;CX5461

Cat No. : M10488

CAS Number : 1138549-36-6

Molecular Formula : C₂₇H₂₇N₇O₂S

Formula Weight : 513.61



Chemical Name : 5H-Benzothiazolo[3,2-a][1,8]naphthyridine-6-carboxamide, 2-(hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-N-[(5-methyl-2-pyrazinyl)methyl]-5-oxo-

Description : CX-5461 is the first potent, selective, orally bioavailable inhibitor of RNA polymerase I, selectively inhibits rRNA synthesis in HCT-116 cells with IC₅₀ of 142 nM, 200-fold selectivity over Pol II; inhibits the initiation stage of rRNA synthesis and induces both senescence and autophagy, but not apoptosis, through a p53-independent process in solid tumor cell lines; demonstrates in vivo antitumor activity against human solid tumors in murine xenograft models. Solid Tumors Phase 2 Clinical

Pathway : Cell Cycle/DNA Damage

Target : DNA/RNA Synthesis

Receptor : PolI-driven transcription of rRNA

Solubility : DMSO: < 5.3 mg/mL

SMILES : O=C(C1=C(SC2=CC=CC=C2)N3C4=C(C=CC(N5CCN(C)CCC5)=N4)C1=O)NCC6=NC=C(C)N=C6

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1. Haddach M, et al. ACS Med Chem Lett. 2012 May 8;3(7):602-6. | 2. Drygin D, et al. Cancer Res. 2011 Feb 15;71(4):1418-30. | 3. Bywater MJ, et al. Cancer Cell. 2012 Jul 10;22(1):51-65. | 4. Achiron A, et al. J Neuroimmunol. 2013 Oct 15;263(1-2):91-7.