www.bioss.com.cn
sales@bioss.com.cn
techsupport@bioss.com.cn
400-901-9800

AGI-5198 (IDH-C35)

产品编号: D50744

CAS: 1355326-35-0

分子式: C27H31FN4O2

纯度: ≥98%

InChi: InChI=1S/C27H31FN4O2/c1-19-9-6-7-14-24(19)26(27(34)30-22-11-4-3-5-12-22)32(23-13-8-10-21(28)17-23)25(33)18-31-16-15-29-20(31)2/h6-10,13-17,22,26H,3-5,11-12,18H2,1-2H3,(H,30,34)

InChi Key: FNYGWXSATBUBER-UHFFFAOYSA-N

Smiles: CC1C=CC=CC=1C(C(=O)NC1CCCCC1)N(C1C=CC=C(F)C=1)C(=O)CN1C=CN=C1C

外观: 固体粉末

作用通路: Isocitrate Dehydrogenase (IDH)

溶解性: DMSO up to 100 mM

保存条件: Store in dry, dark place for one year.

产品介绍: AGI-5198 (IDH-C35) is the first highly potent and selective mutant IDH1 inhibitor that was shown to have anti-tumor efficacy and lower tumor 2HG (2-hydroxyglutarate) in vivo. It inhibits IDH1 R132H mutant and R132C mutant in vitro with IC50 ~0.07 μM and ~0.16 μM, respectively, but not wild-type IDH1 or any of the examined IDH2 isoforms (IC50 > 100 μM). AGI-5198 has good cellular activities in TS603 glioma cell line, also inhibits 2-HG production in HT1080 and U87MG cells with IC50 ~0.48 μM and IC50 ~0.07 μM, respectively. In R132H-IDH1 glioma xenografts (TS603), AGI-5198 (450 mg/kg) caused 50-60% growth inhibition with no signs of toxicity during three weeks of daily treatment, but it did not affect the growth of IDH1 wild-type glioma xenografts (TS516). Under conditions of near complete R-2HG (R-2-hydroxyglutarate) inhibition, AGI-5198 induced demethylation of histone H3K9me3 and expression of genes associated with gliogenic differentiation. Blockade of mutant IDH1 impaired the growth of IDH1-mutant—but not IDH1-wild-type—glioma cells without appreciable changes in genome-wide DNA methylation. AGI-5198 could serve as a very useful chemical probe to assess the biological consequences of IDH1 mutations and the potential of IDH1 inhibitor for treating IDH1 mutant tumors.