

Product Datasheet

crozbaciclib

Catalog No. **BP-01196** · CAS **2099128-41-1** · Form **free base** · Physical state **solid** · Color **off-white to yellow** · Version **1.0** · Revision **2026-09-11**

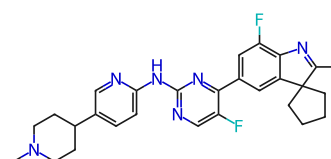
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Target CDK	Research area Cancer
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Molecular formula **C₂₈H₃₀F₂N₆**

Molecular weight **488.5748**

STRUCTURE



DESCRIPTION

Crozbaciclib (CDK4/6/1 Inhibitor) is a CDK4/6 inhibitor with IC50s of 3 and 1 nM, respectively.

BIOLOGICAL ACTIVITY

In Vitro

Crozbaciclib is a potent anti-proliferative agent that arrests U87MG cell line exclusively in G1 (IC50=15.3 ± 2.9 nM in the anti-proliferation assay). Crozbaciclib (13.72 nM; 24 h) significantly increases in the percentage of cells in G1 in U87MG cells

In Vivo

Crozbaciclib (3.125-50 mg/kg;) has tumor growth inhibition values ranging from 62% to 99% in an orthotopic xenograft mouse model of glioblastoma multiforme. And Crozbaciclib results insignificant body weight loss. Crozbaciclib increases life span based on the median survival time of vehicle-treated animals in mice is significant at 162%, at a dose of 50 mg/kg

SOLUBILITY

soluble in DMSO, HCl

In vitro DMSO : 33.33 mg/mL 1 M HCl : 25 mg/mL

REFERENCES

[1]. Yin L, et al. A highly potent CDK4/6 inhibitor was rationally designed to overcome blood brain barrier in glioblastoma therapy. Eur J Med Chem. 2018 Jan 20;144:1-28.