Web: www.taiclone.com
Tel: +886-2-2735-9682
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Ribociclib

Catalog No: tcsc1750

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Size: 200mg

Size: 500mg

Specifications

CAS No:
1211441-98-3

Formula:
$C_{23}H_{30}N_8O$

Pathway:
Cell Cycle/DNA Damage

Target:
CDK

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 4.4 mg/mL (10.13 mM)

Alternative Names:
LEE011

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Observed Molecular Weight:
434.54

Product Description

Ribociclib (LEE011) is a highly specific **CDK4/6** inhibitor with **IC_{50}**s of 10 nM and 39 nM, respectively.

IC50 & Target: IC50: 10/39 nM (CDK4/6)[1]

In Vitro: Treating a panel of 17 neuroblastoma cell lines with Ribociclib (LEE011) across a four-log dose range (10 to 10,000 nM). Treatment with Ribociclib significantly inhibits substrate adherent growth relative to the control in 12 of the 17 neuroblastoma cell lines examined (mean IC_{50}=306±68 nM, considering sensitive lines only, where sensitivity is defined as an IC_{50} of less than 1 μM. Ribociclib treatment of two neuroblastoma cell lines (BE2C and IMR5) with demonstrated sensitivity to CDK4/6 inhibition results in a dose-dependent accumulation of cells in the G_0/G_1 phase of the cell cycle. This G_0/G_1 arrest becomes significant at Ribociclib concentrations of 100 nM (p=0.007) and 250 nM (p=0.01), respectively[2].

In Vivo: CB17 immunodeficient mice bearing BE2C, NB-1643 (MYCN amplified, sensitive in vitro), or EBC1 (non-amplified, resistant in vitro) xenografts are treated once daily for 21 days with Ribociclib (LEE011; 200 mg/kg) or with a vehicle control. This dosing strategy is well tolerated, as no weight loss or other signs of toxicity are observed in any of the xenograft models. Tumor growth is significantly delayed throughout the 21 days of treatment in mice harboring the BE2C or 1643 xenografts (both, p[2].