Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Abemaciclib

Catalog No: tcsc1230

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
1231929-97-7

Formula:
$C_{27}H_{32}F_2N_8$

Pathway:
Cell Cycle/DNA Damage

Target:
CDK

Purity / Grade:
>98%

Solubility:
DMSO : 5 mg/mL (9.87 mM; Need ultrasonic)

Alternative Names:
LY2835219

Observed Molecular Weight:
506.59

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Product Description

Abemaciclib (LY2835219) is a selective **CDK4/6** inhibitor with **IC_{50}** values of 2 nM and 10 nM for CDK4 and CDK6, respectively.

IC50 & Target: IC50: 2 nM (CDK4), 10 nM (CDK6)[3]

In Vitro: Abemaciclib reduces cell viability with the IC_{50} values ranging from 0.5 μM to 0.7 μM, inhibits Akt and ERK signaling but not mTOR activation at head and neck squamous cell carcinoma (HNSCC) cells[1]. Abemaciclib shows inhibition on A375R1-4, M14R, and SH4R with EC_{50} values ranging from 0.3 to 0.6 μM; Abemaciclib inhibits the proliferation of the parental A375 and resistant A375RV1 and A375RV2 cells with similar potencies with IC_{50} values of 395, 260, and 463 nM, respectively[2]. Abemaciclib inhibits CDK4 and CDK6 with low nanomolar potency, inhibits Rb phosphorylation resulting in a G1 arrest and inhibition of proliferation, and its activity is specific for Rb-proficient cells[3].

In Vivo: Abemaciclib (45 mg/kg, p.o.) in combination with everolimus causes a cooperative antitumor effect in HNSCC xenograft tumor[1]. Abemaciclib (45 or 90 mg/kg, p.o.) shows significant tumor growth inhibition in an A375 xenograft model[2].