

# 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

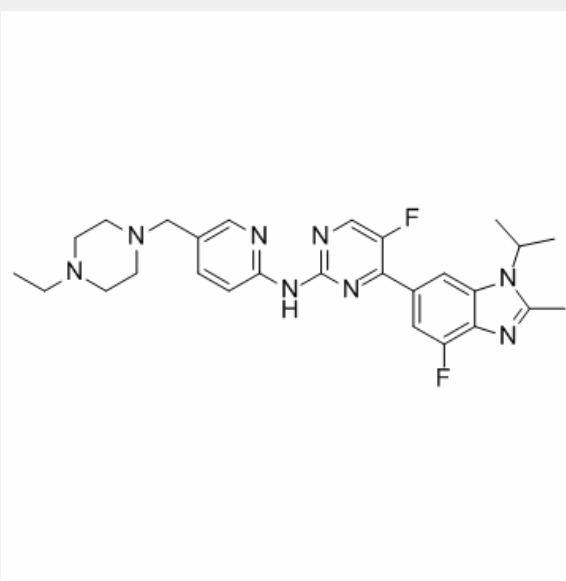
## Product Description

Abemaciclib (LY2835219) is a selective **CDK4/6** inhibitor with **IC<sub>50</sub>** values of 2 nM and 10 nM for CDK4 and CDK6, respectively.

IC50 & Target: IC50: 2 nM (CDK4), 10 nM (CDK6)<sup>[3]</sup>

**In Vitro:** Abemaciclib reduces cell viability with the IC<sub>50</sub> 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<sup>[1]</sup>. Abemaciclib shows inhibition on A375R1-4, M14R, and SH4R with EC<sub>50</sub> 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<sub>50</sub> values of 395, 260, and 463 nM, respectively<sup>[2]</sup>. 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<sup>[3]</sup>.

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



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!