

# **Ribociclib succinate hydrate**

# **Catalog No: tcsc2278**

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

**Size:** 100mg

**Specifications** 

CAS No:

1374639-79-8

Formula:

 $C_{27}H_{38}N_8O_6$ 

Pathway: Cell Cycle/DNA Damage

**Target:** 

CDK

### Purity / Grade:

>98%

#### Solubility:

DMSO : ≥ 19 mg/mL (33.30 mM)

#### **Alternative Names:**

LEE011 (succinate hydrate)

# **Observed Molecular Weight:** 570.64

Copyright 2021 Taiclone Biotech Corp.



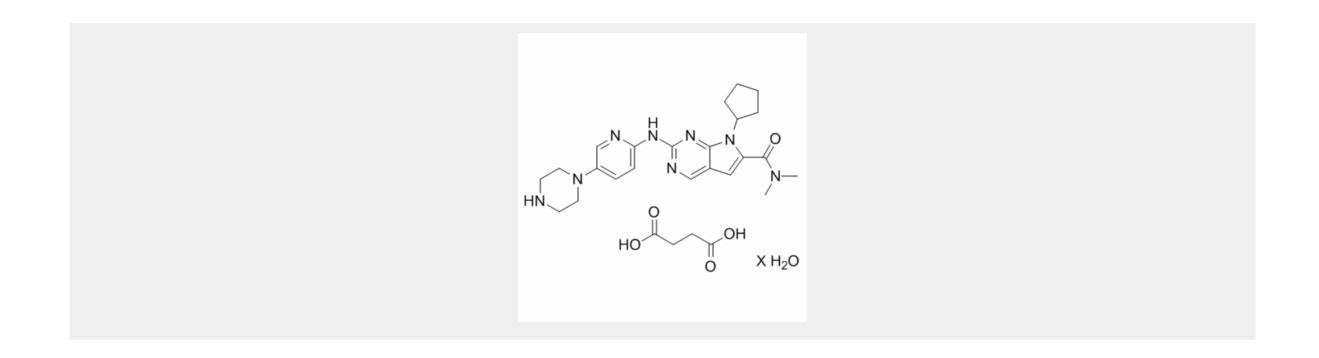
## **Product Description**

Ribociclib succinate hydrate (LEE011 succinate hydrate) is a highly specific **CDK4/6** inhibitor with **IC**<sub>50</sub> values of 10 nM and 39 nM, respectively, and is over 1,000-fold less potent against the cyclin B/CDK1 complex.

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

*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  $IC_{50}=306\pm68$  nM, considering sensitive lines only, where sensitivity is defined as an  $IC_{50}$  of less than 1  $\mu$ M. 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<sup>[2]</sup>.

*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].



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

Copyright 2021 Taiclone Biotech Corp.