

Ribociclib succinate

Chemical Properties

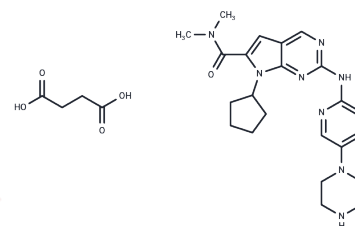
CAS No. : 1374639-75-4

Formula: C₂₇H₃₆N₈O₅

Molecular Weight: 552.63

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	Ribociclib succinate (LEE011 succinate) is a highly specific CDK4/6 inhibitor (IC ₅₀ : 10 nM and 39 nM, respectively). It also is over 1,000-fold less potent against the cyclin B/CDK1 complex.
Targets(IC ₅₀)	CDK
In vitro	Ribociclib succinate treatment of two neuroblastoma cell lines (BE2C and IMR5) with demonstrated sensitivity to CDK4/6 inhibition causes 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. Treatment with Ribociclib obviously 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. Treating a panel of 17 neuroblastoma cell lines with Ribociclib across a four-log dose range (10 to 10,000 nM) [2].
In vivo	Tumor growth is obviously delayed throughout the 21 days of treatment in mice harboring the BE2C or 1643 xenografts (both, p<0.0001), although growth resumed post-treatment. 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 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 [2].

Solubility Information

Solubility	DMSO: 41 mg/mL (74.19 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

A DRUG SCREENING EXPERT

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8095 mL	9.0476 mL	18.0953 mL
5 mM	0.3619 mL	1.8095 mL	3.6191 mL
10 mM	0.181 mL	0.9048 mL	1.8095 mL
50 mM	0.0362 mL	0.181 mL	0.3619 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

VanArsdale T, et al. Molecular Pathways: Targeting the Cyclin D-CDK4/6 Axis for Cancer Treatment. Clin Cancer Res. 2015 Jul 1;21(13):2905-10.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only. Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E_mail: info@targetmol.com Address: 36 Washington Street, Wellesley Hills, MA 02481