

Product Name: LEE011 Revision Date: 01/10/2021 Product Data Sheet

LEE011

Cat. No.:	A8641
CAS No.:	1211441-98-3
Formula:	C23H30N8O
M.Wt:	434.54
Synonyms:	
Target:	Cell Cycle/Checkpoint
Pathway:	Cyclin-Dependent Kinases
Storage:	Store at -20°C

Solvent & Solubility

	insoluble in H2O; ins	soluble in EtOH; \geq 10.88 mg/mL	in DMSO)		
Preparing In Vitro Stock Solutions	Preparing	Mass Solvent Concentration	1mg	5mg	10mg	
	1 mM	2.3013 mL	11.5064 mL	23.0128 mL		
	5 mM	0.4603 mL	2.3013 mL	4.6026 mL		
	APL	10 mM	0.2301 mL	1.1506 mL	2.3013 mL	

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary	CDK4/6 inhibitor			
IC ₅₀ & Target				
In Vitro	Cell Viability Assay			
	Cell Line:	Neuroblastoma cell lines		
	Preparation method:	The solubility of this compound in DMSO is >10.9mg/mL. General tips for		
		obtaining a higher concentration: Please warm the tube at 37 $^\circ\mathrm{C}$ for 10 minutes		
		and/or shake it in the ultrasonic bath for a while. Stock solution can be stored		
		below -20°C for several months.		

1 | www.apexbt.com

	Reacting conditions:	IC50: 306 ± 68 nM, 24 hours		
	Applications:	Treatment with LEE011 significantly inhibited substrate adherent growth		
		relative to the control in 12 of the 17 neuroblastoma cell lines with mean IC50 of		
		306 \pm 68 nM. LEE011 treatment of two neuroblastoma cell lines (BE2C and		
		IMR5) with demonstrated sensitivity to CDK4/6 inhibition resulted in a		
	210	dose-dependent accumulation of cells in the G0/G1 phase of the cell cycle.		
	Animal experiment	DE		
In Vivo	Animal models:	Mice bearing BE2C, or NB-1643 xenografts		
	Dosage form:	Oral administration, 200 mg/kg, once daily for 21 days		
	Applications:	LEE011 (200 mg/kg daily, p.o.) significantly delayed tumor growth in mice		
		harboring the BE2C or NB-1643 xenografts with no weight loss or other signs of		
		toxicity.		
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may		
	•	slightly differ with the theoretical value. This is caused by an experimental		
	BIU	system error and it is normal.		
	PEtro	Planta		

Product Citations

See more customer validations on www.apexbt.com.

References

[1]. Rader J A, Russell M R, Hart L S, et al. Dual CDK4/CDK6 inhibition induces cell-cycle arrest and senescence in neuroblastoma[J]. Clinical cancer research, 2013, 19(22): 6173-6182.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.



APExBIO Technology

www.apexbt.com

7505 Fannin street, Suite 410, Houston, TX 77054. Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com APE













