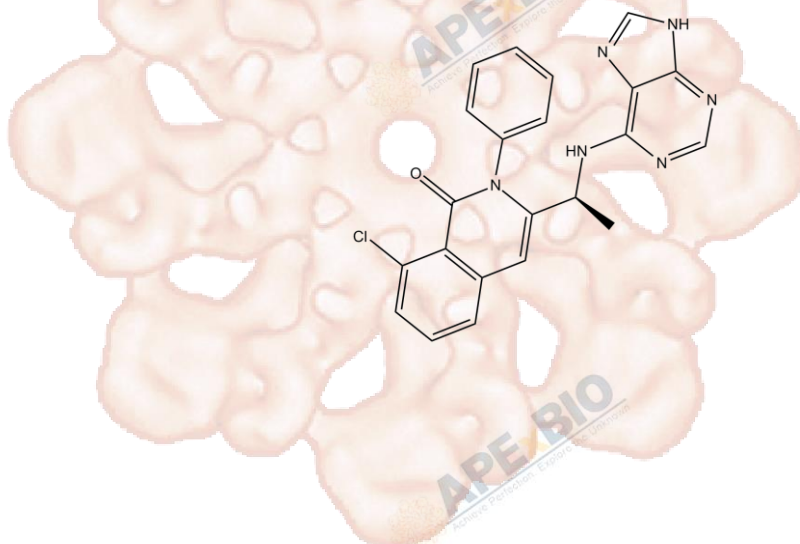


Duvelisib (IPI-145, INK1197)

Cat. No.:	A1720
CAS No.:	1201438-56-3
Formula:	C ₂₂ H ₁₇ ClN ₆ O
M.Wt:	416.86
Synonyms:	
Target:	PI3K/Akt/mTOR Signaling
Pathway:	PI3K
Storage:	Store at -20°C



Solvent & Solubility

≥20.84 mg/mL in DMSO; insoluble in H₂O; ≥24.9 mg/mL in EtOH

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	1 mM	2.3989 mL	11.9944 mL	23.9889 mL
	5 mM	0.4798 mL	2.3989 mL	4.7978 mL
	10 mM	0.2399 mL	1.1994 mL	2.3989 mL

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

Biological Activity

Shortsummary

PI3K-δ/PI3K-γ inhibitor

IC₅₀ & Target

0.36 nM (PI3K-δ), 19.6 nM (PI3K-γ)

In Vitro

Cell Viability Assay

Cell Line:	Primary B cells and primary T cells
Preparation method:	The solubility of this compound in DMSO is > 10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °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.
Reacting conditions:	IC ₅₀ value : 0.5 or 9.5 nM

	Applications:	IPI-145 showed potent anti-proliferative activity against both primary B cells and primary T cells, with IC50 values of 0.5 nM and 9.5 nM, respectively. Thus, it inhibited neutrophil migration and basophil activation.
In Vivo	Animal experiment	
	Animal models:	Rats with previously established air pouches
	Dosage form:	1, 2.5, 5 and 10 mg/kg; p.o.
	Applications:	At the doses of 5 and 10 mg/kg, IPI-145 significantly inhibited neutrophil migration. More specifically, in the 10 mg/kg dose group, all animals showed significantly decreased neutrophil migration. In the 5 and 2.5 mg/kg dose groups, the results were more variable. The animals treated with 1 mg/kg IPI-145 showed little inhibition.
	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 system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

[1]. Winkler DG1, Faia KL, DiNitto JP, Ali JA, White KF, Brophy EE, Pink MM, Proctor JL, Lussier J, Martin CM, Hoyt JG, Tillotson B, Murphy EL, Lim AR, Thomas BD, Macdougall JR, Ren P, Liu Y, Li LS, Jessen KA, Fritz CC, Dunbar JL, Porter JR, Rommel C, Palombella VJ, Changelian PS, Kutok JL. PI3K- δ and PI3K- γ inhibition by IPI-145 abrogates immune responses and suppresses activity in autoimmune and inflammatory disease models. Chem Biol. 2013 Nov 21;20(11):1364-74.

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 APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term 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.

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