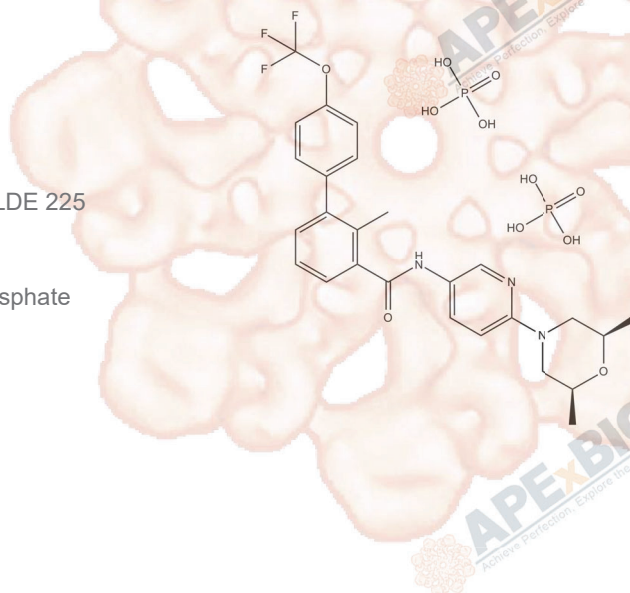


LDE225 Diphosphate

Cat. No.:	A3543
CAS No.:	1218778-77-8
Formula:	C ₂₆ H ₃₂ F ₃ N ₃ O ₁₁ P ₂
M.Wt:	681.49
Synonyms:	LDE 225 Diphosphate;NVP-LDE 225 Diphosphate;Erismodegib Diphosphate;LDE-225 Diphosphate
Target:	Stem Cell
Pathway:	Smoothened
Storage:	Store at -20°C



Solvent & Solubility

≥ 27.85 mg/mL in DMSO, insoluble in EtOH, insoluble in H₂O

In Vitro	Preparing Stock Solutions	Mass			
		Solvent Concentration	1mg	5mg	10mg
		1 mM	1.4674 mL	7.3369 mL	14.6737 mL
		5 mM	0.2935 mL	1.4674 mL	2.9347 mL
		10 mM	0.1467 mL	0.7337 mL	1.4674 mL

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

Biological Activity

Shortsummary

Smo antagonist

IC₅₀ & Target

Cell Viability Assay

In Vitro

Cell Line: primary CD34+ CP-CML cells

Preparation method: The solubility of this compound in DMSO is > 27.85 mg/mL. 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:	10 nM, 100 nM, 72 hours
	Applications:	LDE225 (10 nM, 100 nM, 72 hours) inhibited downstream Hh signaling in primary CD34+ CP-CML cells. LDE225 (0.5-100 nM, 72h) significantly reduced colony forming cell (CFC) re-plating efficiency of primitive human CP-CML cells. LDE225 (10 nM) alone or in combination with nilotinib (5 µM) significantly reduced LTC-IC numbers in primary CD34+ CP-CML samples.
In Vivo	Animal experiment	
	Animal models:	CP-CML murine model, BCR-ABL expressing mice
	Dosage form:	80 mg/kg by gavage, daily
	Applications:	Treatment of Scl-tTa-BCR-ABL mice with LDE225+nilotinib resulted in inhibition of Gli1 in CP-CML BM LTHSC. LDE225 in combination with nilotinib on human CML LSC was capable of engrafting immunodeficient mice. LDE225+nilotinib administration significantly reduced leukaemia stem and progenitor cells in the spleen of BCR-ABL expressing mice.
	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]. Irvine D A, Zhang B, Kinstrie R, et al. Deregulated hedgehog pathway signaling is inhibited by the smoothed antagonist LDE225 (Sonidegib) in chronic phase chronic myeloid leukaemia[J]. Scientific reports, 2016, 6: 25476.

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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