

Product Data Sheet

LDE225 (NVP-LDE225,Erismodegib)

Cat. No.:	B2266
CAS No.:	956697-53-3
Formula:	C ₂₆ H ₂₆ F ₃ N ₃ O ₃
M.Wt:	485.5
Synonyms:	
Target:	Stem Cell
Pathway:	Smoothened
Storage:	Store at -20°C



Solvent & Solubility

≥24.3 mg/mL in DMSO; insoluble in H₂O; ≥23 mg/mL in EtOH with ultrasonic

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	1 mM	2.0597 mL	10.2987 mL	20.5973 mL
	5 mM	0.4119 mL	2.0597 mL	4.1195 mL
	10 mM	0.2060 mL	1.0299 mL	2.0597 mL

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

Biological Activity

Shortsummary

Smoothened inhibitor,potent and selective

IC₅₀ & Target

2.5 nM (human Hedgehog), 1.3 nM (mouse Hedgehog)

In Vitro

Cell Viability Assay

Cell Line:	Cancer stem cells (CSCs)
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:	10 μM, 48 hours (for apoptosis induction)10 μM, 7 days (for cell viability)

		inhibition)
	Applications:	LDE225 induced apoptosis in a dose-dependent manner. Treatment of prostate CSCs resulted in an increase in the expression of cleaved caspase-3 and PARP. LDE225 inhibited cell viability in primary and secondary spheroids in a dose-dependent manner.
In Vivo	Animal experiment	
	Animal models:	NOD/SCID IL2R γ null mice injected with human prostate CSCs
	Dosage form:	Intraperitoneal injection, 20mg/kg body weight, three times per week for 4 weeks
	Applications:	NVP-LDE-225 had no effect on body weight of mice. Interestingly, NVP-LDE-225 inhibited CSC tumor growth, as demonstrated by the significant reduction in tumor weight.
	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

1. Coffman LG, Choi YJ, et al. "Human carcinoma-associated mesenchymal stem cells promote ovarian cancer chemotherapy resistance via a BMP4/HH signaling loop." *Oncotarget*. 2016 Feb 9;7(6):6916-32.PMID:26755648

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References

[1] Nanta R, Kumar D, Meeker D, et al. NVP-LDE-225 (Erismodegib) inhibits epithelial-mesenchymal transition and human prostate cancer stem cell growth in NOD/SCID IL2R γ null mice by regulating Bmi-1 and microRNA-128. *Oncogenesis*, 2013, 2(4): e42.

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 \times 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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