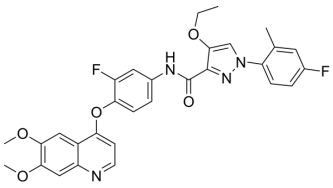
LDC1267

Cat. No.:	HY-12494
CAS No.:	1361030-48-9
Molecular Formula:	$C_{30}H_{26}F_2N_4O_5$
Molecular Weight:	560.55
Target:	TAM Receptor
Pathway:	Protein Tyrosine Kinase/RTK
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (89.20 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.7840 mL	8.9198 mL	17.8396 mL
	5 mM	0.3568 mL	1.7840 mL	3.5679 mL
	10 mM	0.1784 mL	0.8920 mL	1.7840 mL

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

In Vivo

1. Add each solvent one by one: 50% PEG300 >> 50% saline
   Solubility: 10 mg/mL (17.84 mM); Suspended solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (4.46 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 2.5 mg/mL (4.46 mM); Suspended solution; Need ultrasonic
4. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (4.46 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

LDC1267 is a highly selective TAM (Tyro3, Axl and Mer) kinase inhibitor with IC_{50}s of <5 nM/8 nM/29 nM for Tyro3,Axl and Mer respectively[1].

IC_{50} & Target

IC50: <5 nM/8 nM/29 nM(Tyro3/Axl/Mer)[1]

In Vitro	LDC1267 (up to 30 μM; 72 hours) moderately affectes proliferation of 11 cell lines with an average IC_{50} value for those 11 cell lines is ~15μM[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	LDC1267 (20 mg/kg; i.p.; every 12 hours for 14 day) markedly reduces metastatic spreading of melanomas[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	C57BL/6J wild type mice (8-12 weeks old syngeneic bearing B16F10 cells)[1]
Dosage:	20mg/kg
Administration:	Intraperitoneal injection; every 12 hours for 14 days
Result:	Markedly reduced metastatic spreading of melanomas.

CUSTOMER VALIDATION

- Theranostics. 2018 Jul 30;8(15):4262-4278.
- Cell Mol Life Sci. 2022 May 27;79(6):316.
- FEBS J. 2021 Dec 17.
- Biology (Basel). 2022, 11(7), 1059.
- Nencki Institute of Experimental Biology. The Laboratory of Cell Biology of the International Institute of Molecular and Cell Biology in Warsaw. 2022 Oct.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Paolino M, et al. The E3 ligase Cbl-b and TAM receptors regulate cancer metastasis via natural killer cells. Nature. 2014 Mar 27;507(7493):508-12.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA