# **Product** Data Sheet

#### LCL521

Cat. No.:HY-103593CAS No.:1226851-11-1Molecular Formula: $C_{31}H_{52}N_4O_7$ Molecular Weight:592.77

Target: Phospholipase

Pathway: Metabolic Enzyme/Protease

Storage: Pure form -20°C 3 years
In solvent -80°C 6 months

-20°C 1 month

## **SOLVENT & SOLUBILITY**

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility:  $\geq$  2.75 mg/mL (4.64 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE- $\beta$ -CD in saline) Solubility:  $\geq$  2.75 mg/mL (4.64 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.75 mg/mL (4.64 mM); Clear solution

#### **BIOLOGICAL ACTIVITY**

Description	LCL521 is an acid ceramidase (ACDase) inhibitor. LCL521 also inhibits the lysosomal acid sphingomyelinase (ASMase) <sup>[1]</sup> .
IC <sub>50</sub> & Target	ACDase, ASMase <sup>[1]</sup>
In Vitro	LCL521 (1 $\mu$ M) acts as a potent inhibitor of cellular ACDase activity, whereas 10 $\mu$ M LCL521 has an additional, decreased affect on the $\alpha$ -form of this enzyme. LCL521 (10 $\mu$ M) causes a time-dependent (1 hours and 5 hours) decrease of the $\alpha$ -ACDase form in MCF7 cells <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### **CUSTOMER VALIDATION**

• Nat Immunol. 2023 May;24(5):802-813.

See more customer validations on www.MedChemExpress.com

### **REFERENCES**

[1]. Bai A, et al. Targeting (cellu 15;22(24):6933-44.	ılar) lysosomal acid ceramid	ase by B13: design, synthesis and	evaluation of novel DMG-B13 ester prodrugs	. Bioorg Med Chem. 2014 Dec
	Caution: Product has n	ot been fully validated for mo	edical applications. For research use on	ly.
	Tel: 609-228-6898	Fax: 609-228-5909	E-mail: tech@MedChemExpress.co	m
	Address: I	1 Deer Park Dr, Suite Q, Monmo	outh Junction, NJ 08852, USA	

Page 2 of 2 www.MedChemExpress.com