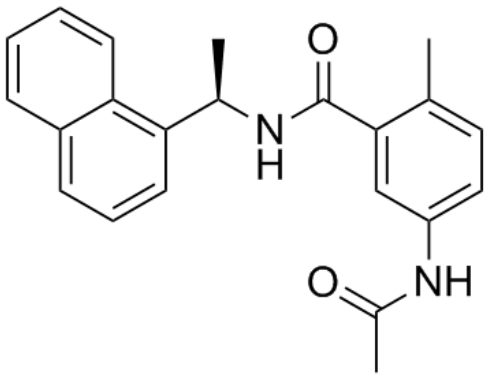
Product Data Sheet

Product Name: PLpro inhibitor
Cat. No.: GC36939

Chemical Properties

Cas. No.	1093070-14-4		
SMILES	O=C(C1=CC(NC(C)=O)=CC=C1C)N[C@H](C)C2=C(C=CC=C3)C3=CC=C2		
Formula	$C_{22}H_{22}N_2O_2$	M.Wt	346.42
Solubility	DMSO: ≥ 42 mg/mL (121.24 mM)	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		

Structure



Background

PLpro inhibitor is a potent inhibitor of papain-like protease (PLpro) with IC50 of 2.6 uM.IC50 Value: 2.6 uM [1]Target: PLpro; SARS-CoVin vitro: PLpro inhibitor is a potent inhibitor against the papain-like protease (PLpro) from the coronavirus that causes severe acute respiratory syndrome (SARS-CoV). PLpro inhibitor was found to have IC50 value of 2.6 ± 0.1 μM. PLpro inhibitor display significant antiviral activity with EC50 values of 13.1±0.7 uM, without toxicity up to the highest concentration tested. Notably, the increasing antiviral potency correlates with the in vitro inhibition of PLpro, suggesting that the compounds work directly on the enzyme in cells [1,2].in vivo:

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[1]. Ratia, K., et al., A noncovalent class of papain-like protease/deubiquitinase inhibitors blocks SARS virus replication. Proc Natl Acad Sci U S A, 2008. 105(42): p. 16119-24. [2]. http://www.google.com/patents/WO2010022355A1cl=en