

Product Data Sheet

Cas No.:	314042-01-8	Cat. No:	PL10891
Product Name:		CID-1067700	
Product synonym:	2-[[(苯甲酰基氨基)硫代甲酰]氨基]-4,7-二氢-5,5-二甲基-5H-噻吩并[2,3-C]吡喃-3-羧酸;2-(3-苯甲酰硫脲基)5,5-二甲基-5,7-二氢-4H-噻吩[2,3-C]吡喃-3-羧酸;2-(3-苯甲酰硫脲基)5,5-二甲基-5,7-二氢-4H-噻吩[2,3-C]吡喃-3-甲酸;化合物CID-1067700;2-[[(苯甲酰基氨基)硫代甲酰]氨基]-4,7-二氢-5,5-二甲基-5H-噻吩并[2,3-C]吡喃-3-羧酸		
Chemical name:	CID-1067700		
MF:	C18H18N2O4S2	FW:	390.48
Purity:	≥98%	Batch No.:	-
Storage:			
Structural formula:	<u>·</u>	S NH NH OH	
λmax:	-	Formulation:	-
Solubility:			
SMILES:	O=C(C1=C(NC(NC(C2=CC=CC=C2)=O)=S)SC3=C1CC(C)(C)OC3)O		
InChI Code:	-		
InChl Key:			
	WARNING This product is	not for human or veterinary use.	

Product Description

CID-1067700 (ML282) 是 pan GTPase 抑制剂,可竞争性抑制大脑 7 (Rab7) 中的 Ras 相关蛋白,Ki 为 13 nM。

生物活性	CID-1067700 (ML282) is a pan GTPase inhibitor, and competitively inhibits Ras-related in brain 7 (Rab7) with a Ki of 13 nM.	
IC50 & Target[1][2]	Ki: 13 nM (Rab7)	
体外研究(In Vitro)	CID-1067700 (ML282) is a pan GTPase inhibitor, and competitively inhibits Rab7 with a Ki of 13 nM. CID-1067700 shows inhibitory activity against nucleotide binding by Rab7, with Kds of 100 nM and 40 nM for BODIPY-GTP and BODIPY-GDP, respectively. With increasing concentration, CID-1067700 causes strong inhibition on binding of the BODIPY-linked nucleotides, with EC50 values of 11.22 ± 1.34 nM for BODIPY-GTP and 20.96 ± 1.34 nM for BODIPY-GDP and calculated Ki values of 12.89 nM and 19.70 nM respectively. CID-1067700 (10 μ M) has no effect on the rate of release of bound BODIPY-linked nucleotide by wild type Rab7 under equilibrium binding conditions. CID-1067700 (0.40 μ M) inhibits Rab7 activity, NF-kB activation as well as AID induction in B cells. Furthermore, CID-1067700 binds Rab7 with a high affinity (EC50: $10-20$ nM), an	

体内研究(In Vivo)	CID-1067700 (ML282; 16 mg/kg, i.p.) prevents disease development in lupus-prone mice by Rab7 inhibition, and reduces IgG-IC deposition in MRL/Fas mice. CID-1067700 also targets B cells and specifically impairs the CSR machinery in vivo. has not independently confirmed the accuracy of these methods. They are for reference only.	
包装储存	Powder -20°C 3 years; 4°C 2 years	
溶解度数据	In Vitro: DMSO: 12.5 mg/mL (32.01 mM; Need ultrasonic)配制储备液	