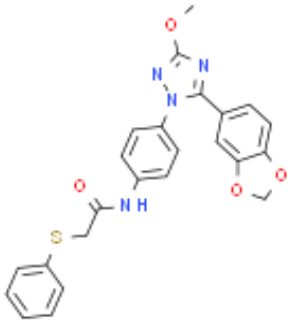
Product Data Sheet

Cas No.:	853625-60-2	Cat. No:	PC16855
Product Name:	SecinH3.		
Product synonym:	N-[4-[5-(1,3-苯并二氧杂环戊烯-5-基)-3-甲氧基-1H-1,2,4-噻唑-1-基]苯基]-2-(苯基硫代)乙酰胺;N-[4-[5-(1,3-BENZODIOXOL-5-YL)-3-METHOXY-1H-1,2,4-TRIAZOL-1-YL]PHENYL]-2-(PHENYLTHIO)ACETAMIDE		
Chemical name:	SecinH3.		
MF:	C24H20N4O4S	FW:	460.5050
Purity:	≥98%	Batch No.:	-
Storage:			
Structural formula:			
λmax:	-	Formulation:	-
Solubility :			
SMILES :	S(C1C([H])=C([H])C([H])=C([H])C=1[H])C([H])([H])C(N([H])C1C([H])=C([H])C(=C([H])C=1[H])N1C(C2C([H])=C([H])C3=C(C=2[H])OC([H])([H])O3)=NC(=N1)OC([H])([H])[H])=O		
InChI Code:	-		
InChI Key:			
WARNING This product is not for human or veterinary use.			

Product Description

Sec7特异性GEF抑制剂。SecinH3 是 cytohesins 的拮抗剂，对于 hCyh1， hCyh2，mCyh3，hCyh3，drosophila steppke 和 yGea2-S7 的 IC50 值分别为 5.4 μM，2.4 μM，5.4 μM，5.6 μM，5.6 μM 和 65 μM。

生物活性	SecinH3 is an antagonist of **cytohesins** with **IC_{50}**s of 5.4 μM, 2.4 μM, 5.4 μM, 5.6 μM, 5.6 μM and 65 μM for **hCyh1**, **hCyh2**, **mCyh3**, **hCyh3**, **drosophila steppke** and **yGea2-S7**, respectively.
IC50 & Target[1][2]	IC50: 5.4 μM (hCyh1)，2.4 μM (hCyh2)，5.4 μM (mCyh3)，5.6 μM (hCyh3)，5.6 μM (drosophila steppke), 65 μM (yGea2-S7)

体外研究(In Vitro)	SecinH3 is a Sec7-specific guanine nucleotide exchange factor (GEF) inhibitor with preference for the small GEFs of the cytohesin family. SecinH3 almost completely blocks the insulin-dependent transcriptional repression of *IGFBP1* with an IC_{50} of 2.2 μM. Insulin-stimulated translocation of ARF6 to the plasma membrane is also inhibited by SecinH3. It is found that SecinH3 inhibits the insulin-dependent phosphorylation of Akt and FoxO1A in a concentration-dependent manner. Insulin-induced exclusion of FoxO1A from the nucleus is completely prevented by SecinH3. The binding of IRS1 to the insulin receptor is also inhibited by SecinH3. **Medlife has not independently confirmed the accuracy of these methods. They are for reference only.**
体内研究(In Vivo)	Compare to mice fed the same chow without SecinH3, the expression levels of the insulin-repressed gluconeogenic genes are elevated, whereas the insulin-induced glycolytic genes are reduced in SecinH3-treated mice. Insulin-stimulated Akt phosphorylation is also inhibited in SecinH3-treated mice. The expression of the genes for two key enzymes of mitochondrial β-oxidation, carnitine palmitoyltransferase 1a (*Cpt1a*) and hydroxyacyl-CoA dehydrogenase (*Hadha*), both of which are repressed by insulin, is increased in the SecinH3-treated mice. It is found significantly increased levels of serum insulin with slightly elevated glucose concentrations in SecinH3-treated mice. Accordingly, 3-hydoxybutyrate is increased in the serum of SecinH3-treated mice. **Medlife 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 In solvent **-80°C** 6 months **-20°C** 1 month

溶解度数据

体外研究:

DMSO : 130 mg/mL (282.30 mM; Need ultrasonic)

配制储备溶液	溶剂体积 质量 浓度	1 mg	5 mg	10 mg
	1 mM	2.1715 mL	10.8575 mL	21.7151 mL
	5 mM	0.4343 mL	2.1715 mL	4.3430 mL
	10 mM	0.2172 mL	1.0858 mL	2.1715 mL

* 产品不同，其溶解度不同。建议根据产品选择合适的溶剂配制储备溶液；配成溶液后，**建议分装保存，避免反复冻融造成的产品失效**。

储备液的保存方式和期限： -80°C, 6 months; -20°C, 1 month。-80°C 储存时，建议在 6 个月内使用，-20°C 储存时，建议在 1 个月内使用。

体内研究:

建议根据您的实验动物和给药方式选择适当的溶解方案。以下溶解方案都建议先按照 **体外研究** 方式配制澄清的储备液，再依次添加助溶剂：

——为保证实验结果的可靠性，**澄清的储备液可以根据储存条件，适当保存**；体内实验的工作液，**建议您现用现配，当天使用**； 以下溶剂前显示的百分比是指**该溶剂在您配制终溶液中的体积占比**；如在配制过程中出现沉淀、析出现象，可以通过**加热和/或超声的方式助溶**

1. 建议依照次序添加每种溶剂： 10% DMSO 90% corn oil

   Solubility: ≥ 3.25 mg/mL (7.06 mM); Clear solution

   此方案可获得 ≥ 3.25 mg/mL (7.06 mM，饱和度未知) 的澄清溶液，此方案不适用于实验周期在半个月以上的实验。

   以 1 mL 工作液为例，取 100 μL 32.5 mg/mL 的澄清 DMSO 储备液加到 900 μL玉米油中，混合均匀。

*