Product Data Sheet

Cas No.:	40045-50-9	Cat. No:	PC11814
Product Name:	SU 3327		
Product synonym:	2-氨基-5-[(5-硝基-2-噻唑基)硫代]-1,3,4-噻二唑;5-[(5-硝基-2-噻唑)硫代]-1,3,4噻二唑-2-胺		
Chemical name:	SU 3327		
MF:	C5H3N5O2S3	FW:	261.3046
Purity:	≥98%	Batch No.:	-
Storage:			
λmax：	-	Formulation：	-
Solubility :			
SMILES :	S1C(=C([H])N=C1SC1=NN=C(N([H])[H])S1)[N+](=O)[O-]		
InChI Code:	-		
InChI Key:			
WARNING This product is not for human or veterinary use.			

Product Description

JNK抑制剂,SU3327 是一种有效的，选择性的且具有底物竞争性的 JNK 抑制剂，IC50 为 0.7 μM。SU3327 还以 IC50 值为 239 nM 抑制 JNK 和 JIP 之间的蛋白相互作用。SU3327 对 p38α 和 Akt 激酶的活性较低。

生物活性	SU3327 is a potent, selective and substrate-competitive **JNK** inhibitor with an **IC_{50}** of 0.7 μM. SU3327 also inhibits protein-protein interactions between **JNK** and JNK Interacting Protein (JIP) with an **IC_{50}** of 239 nM. SU3327 shows less active against p38α and Akt kinase.
IC50 & Target[1][2]	IC50: 0.7 μM (JNK); 239 nM (JNK-JIP interactions)
体外研究(In Vitro)	SU3327 (compound 9) is able to inhibit TNF-α stimulated phosphorylation of c-Jun in HeLa cells (EC_{50} = 6.23 μM). SU3327 (25 nM) pretreatment of human-derived cerebral microvascular endothelial cells (hCMEC/D3) effectively reduces LPS-induced polymorphonuclear leukocytes (PMN) rolling/adhesion to hCMEC/D3, prevents activation of AP-1, and significantly reduces expression of VCAM-1. **Medlife has not independently confirmed the accuracy of these methods. They are for reference only.**

<table>
<tr><td>体内研究(In Vivo)</td><td>
SU3327 (Compound 9; 25 mg/kg; intraperitoneal injection; male BKS.Cg-+Lepr/+Lepr/OlaHsd db/db mice) treatment possesses the ability to restore insulin sensitivity in mice models of diabetes.
SU3327 (Compound 9) has favorable microsomal and plasma stability ($T_{1/2}$ = 27 min).

Medlife has not independently confirmed the accuracy of these methods. They are for reference only.
<table>
<tr><td>Animal Model:</td><td>Male BKS.Cg-+Lepr/+Lepr/OlaHsd db/db mice (11-week-old) injected with insulin</td></tr>
<tr><td>Dosage:</td><td>25 mg/kg</td></tr>
<tr><td>Administration:</td><td>Intraperitoneal injection</td></tr>
<tr><td>Result:</td><td>Resulted in a statistically significant reduction in blood glucose levels.</td></tr>
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<tr><td>包装储存</td><td>
<table>
<tr><td>Powder</td><td>-20°C</td><td>3 years</td></tr>
<tr><td></td><td>4°C</td><td>2 years</td></tr>
<tr><td>In solvent</td><td>-80°C</td><td>6 months</td></tr>
<tr><td></td><td>-20°C</td><td>1 month</td></tr>
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溶解度数据

体外研究:

DMSO : 62.5 mg/mL (239.19 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	3.8270 mL	19.1351 mL	38.2702 mL
	5 mM	0.7654 mL	3.8270 mL	7.6540 mL
	10 mM	0.3827 mL	1.9135 mL	3.8270 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 40% PEG300 5% Tween-80 45% saline

   Solubility: ≥ 2.08 mg/mL (7.96 mM); Clear solution

   此方案可获得 ≥ 2.08 mg/mL (7.96 mM，饱和度未知) 的澄清溶液。

   以 1 mL 工作液为例，取 100 μL 20.8 mg/mL 的澄清 DMSO 储备液加到 400 μL PEG300 中，混合均匀；向上述体系中加入50 μL Tween-80，混合均匀；然后继续加入 450 μL生理盐水定容至 1 mL。

   将 0.9 g 氯化钠，完全溶解于 100 mL ddH?O 中，得到澄清透明的生理盐水溶液

2. 建议依照次序添加每种溶剂： 10% DMSO 90% (20% SBE-β-CD in saline)

   Solubility: ≥ 2.08 mg/mL (7.96 mM); Clear solution

   此方案可获得 ≥ 2.08 mg/mL (7.96 mM，饱和度未知) 的澄清溶液。

   以 1 mL 工作液为例，取 100 μL 20.8 mg/mL 的澄清 DMSO 储备液加到 900 μL 20% 的 SBE-β-CD 生理盐水水溶液中，混合均匀。

   将 2 g 磺丁基醚 β-环糊精加入 5 mL 生理盐水中，再用生理盐水定容至 10 mL，完全溶解，澄清透明

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