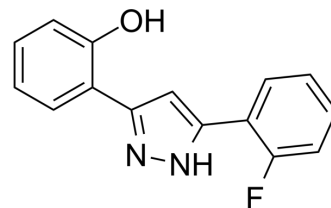


VU0420373

Cat. No.:	HY-115658		
CAS No.:	38376-29-3		
Molecular Formula:	C ₁₅ H ₁₁ FN ₂ O		
Molecular Weight:	254.26		
Target:	Bacterial		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 50 mg/mL (196.65 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
			1 mM	3.9330 mL	19.6649 mL	39.3298 mL
			5 mM	0.7866 mL	3.9330 mL	7.8660 mL
			10 mM	0.3933 mL	1.9665 mL	3.9330 mL
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 1 mg/mL (3.93 mM); Clear solution					
	2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 1 mg/mL (3.93 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	VU0420373 is a potent heme sensor system (HssRS) activator with an EC ₅₀ of 10.7 μM and a pEC ₅₀ of 4.97. VU0420373 induces heme biosynthesis, and is toxic to fermenting <i>S. aureus</i> ^[1] .
IC ₅₀ & Target	EC ₅₀ : 10.7 μM (HssRS) ^[1] pEC ₅₀ : 4.97 (HssRS) ^[1]
In Vitro	VU0420373 (compound 2e) has an IC ₅₀ of >60 μM for Newman aerobic and Newman anaerobic, respectively ^[1] . VU0420373 (40 μM; 2, 4, 6, 8 hours) is able to preadapt <i>S. aureus</i> to a toxic concentration of heme (20 μM) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Brendan F Dutter, et al. Decoupling Activation of Heme Biosynthesis From Anaerobic Toxicity in a Molecule Active in Staphylococcus Aureus. ACS Chem Biol. 2016 May 20;11(5):1354-61.

Caution: Product has not been fully validated for medical applications. For research use only.

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