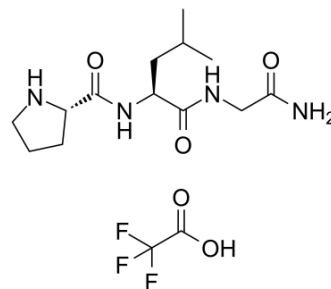


## MIF-1 TFA

Cat. No.:	HY-107663A
Molecular Formula:	C <sub>15</sub> H <sub>25</sub> F <sub>3</sub> N <sub>4</sub> O <sub>5</sub>
Molecular Weight:	398.38
Target:	Others
Pathway:	Others
Storage:	Protect from light
	Powder    -80°C    2 years
	-20°C    1 year

\* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



## SOLVENT & SOLUBILITY

In Vitro	DMSO : 125 mg/mL (313.77 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
			1 mM	2.5102 mL	12.5508 mL	25.1017 mL
			5 mM	0.5020 mL	2.5102 mL	5.0203 mL
			10 mM	0.2510 mL	1.2551 mL	2.5102 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: ≥ 2.08 mg/mL (5.22 mM); Clear solution					
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (5.22 mM); Clear solution					
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (5.22 mM); Clear solution					

## BIOLOGICAL ACTIVITY

Description	MIF-1 TFA, an antibiotic with melanin synthesis inhibitory activity, strongly inhibits melanin formation in <i>Streptomyces bikiniensis</i> NRRLB-1049 and B16 melanoma cells <sup>[1]</sup> .
In Vitro	MIF-1 (Melanostatin, 1 μM) provoked a reversible hyperpolarization and a suppression of spontaneous action potentials <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## REFERENCES

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[1]. PRODUCTION, et al. MELANOSTATIN, A NEW MELANIN SYNTHESIS INHIBITOR. The Journal of Antibiotics. 1991.

[2]. J A Valentijn, et al. Melanostatin (NPY) inhibited electrical activity in frog melanotrophs through modulation of K<sup>+</sup>, Na<sup>+</sup> and Ca<sup>2+</sup> currents. J Physiol . 1994 Mar 1;475(2):185-95.

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

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