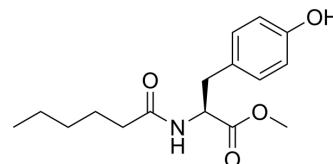


MHP

Cat. No.:	HY-101572		
CAS No.:	1104874-94-3		
Molecular Formula:	C ₁₆ H ₂₃ NO ₄		
Molecular Weight:	293.36		
Target:	SphK		
Pathway:	Immunology/Inflammation		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (340.88 mM)
 * "≥" means soluble, but saturation unknown.

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		3.4088 mL	17.0439 mL	34.0878 mL
	5 mM		0.6818 mL	3.4088 mL	6.8176 mL
	10 mM		0.3409 mL	1.7044 mL	3.4088 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
 Solubility: ≥ 2.5 mg/mL (8.52 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
 Solubility: ≥ 2.5 mg/mL (8.52 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.5 mg/mL (8.52 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

MHP (Methyl caprooyl tyrosinate) is an activator of sphingosine kinase (SPHK1), and significantly stimulates CAMP mRNA and protein production. MHP (Methyl caprooyl tyrosinate) enhances antimicrobial defense and innate immunity^[1].

IC₅₀ & Target

SphK1

In Vitro

MHP (50-250 μM for 24 hours) increases CAMP mRNA levels in keratinocytes^[1].

MHP (100 μ M for 24 hours) increases CAMP protein levels in keratinocytes^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay^[1]

Cell Line:	Keratinocytes
Concentration:	100 μ M
Incubation Time:	24 hours
Result:	Increased CAMP protein levels in keratinocytes.

REFERENCES

[1]. Jeong SK, et al. Sphingosine kinase 1 activation enhances epidermal innate immunity through sphingosine-1-phosphate stimulation of cathelicidin production. J Dermatol Sci. 2015 Sep;79(3):229-34.

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

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