



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

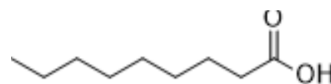
www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic)



Nonanoic acid

Cat. No.:	HY-N7057
CAS No.:	112-05-0
Molecular Formula:	C ₉ H ₁₈ O ₂
Molecular Weight:	158.24
Target:	Bacterial; Endogenous Metabolite
Pathway:	Anti-infection; Metabolic Enzyme/Protease
Storage:	Store at room temperature 3 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro	DMSO : ≥ 100 mg/mL (631.95 mM)				
	* "≥" means soluble, but saturation unknown.				
	Preparing Stock Solutions	Solvent Concentration Mass	1 mg	5 mg	10 mg
		1 mM	6.3195 mL	31.5976 mL	63.1951 mL
		5 mM	1.2639 mL	6.3195 mL	12.6390 mL
10 mM		0.6320 mL	3.1598 mL	6.3195 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: ≥ 2.5 mg/mL (15.80 mM); Clear solution				
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (15.80 mM); Clear solution				
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (15.80 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	Nonanoic acid is a naturally-occurring saturated fatty acid with nine carbon atoms. Nonanoic acid significantly reduces bacterial translocation, enhances antibacterial activity, and remarkably increases the secretion of porcine β-defensins 1 (pBD-1) and pBD-2 ^[1] .
IC ₅₀ & Target	Human Endogenous Metabolite
In Vitro	Nonanoic acid?upregulates endogenous host defense peptides to enhance intestinal epithelial immunological barrier

function via histone deacetylase inhibition^[1].

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

CUSTOMER VALIDATION

- Nature. 2024 Dec 18.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Wang J, et al. Caprylic acid and nonanoic acid upregulate endogenous host defense peptides to enhance intestinal epithelial immunological barrier function via histone deacetylase inhibition. *Int Immunopharmacol.* 2018 Dec;65:303-311.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA