



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) 

PRODUCT INFORMATION



Rhynchophylline

Item No. 37946

CAS Registry No.: 76-66-4
Formal Name: (α E,1'R,6'R,7'S,8'aS)-6'-ethyl-1,2,2',3',6',7',8',8'a-octahydro- α -(methoxymethylene)-2-oxo-spiro[3H-indole-3,1'(5'H)-indolizine]-7'-acetic acid, methyl ester

Synonyms: NSC 21731, Mitrinermine

MF: C₂₂H₂₈N₂O₄

FW: 384.5

Purity: \geq 98%

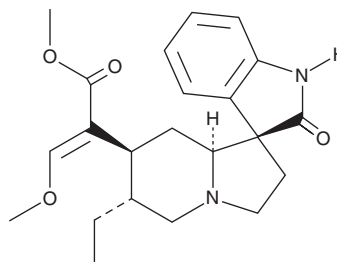
UV/Vis.: λ_{\max} : 244 nm

Supplied as: A crystalline solid

Storage: -20°C

Stability: \geq 2 years

Item Origin: Plant/*Uncaria tomentosa*



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Rhynchophylline is supplied as a crystalline solid. A stock solution may be made by dissolving the rhynchophylline in the solvent of choice, which should be purged with an inert gas. Rhynchophylline is soluble in organic solvents such as chloroform and dimethyl formamide. The solubility of rhynchophylline in these solvents is approximately 30 and 1 mg/ml, respectively.

Description

Rhynchophylline is an alkaloid that has been found in *U. rhynchophylla* and has diverse biological activities.¹⁻⁴ It inhibits aggregation of isolated rabbit platelets induced by arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607), collagen, or ADP (IC₅₀s = 0.72, 0.74, and 0.67 mmol/L).¹ *In vivo*, rhynchophylline (0.25 mg/kg) decreases the number of sleep-wake cycles and increases total sleep time and rapid eye movement (REM) sleep in rats.² It reduces infarct volume and reverses sensory-motor and spatial memory defects in a mouse model of stroke induced by middle cerebral artery occlusion (MCAO) when administered at a dose of 40 mg/kg.³ Rhynchophylline (10 and 20 mg/kg) also reduces hippocampal production of reactive oxygen species (ROS) and malondialdehyde (MDA) levels and decreases escape latency in the Morris water maze test in a mouse model of Alzheimer's disease induced by amyloid- β (1-42) (A β 42).⁴

References

1. Chen, C.X., Jin, R.M., Li, Y.K., *et al.* Inhibitory effect of rhynchophylline on platelet aggregation and thrombosis. *Zhongguo Yao Li Xue Bao* **13**(2), 126-130 (1992).
2. Yoo, J.H., Ha, T.-W., Hong, J.T., *et al.* Rhynchophylline, one of major constituents of *Uncariae Ramulus et Uncus* enhances pentobarbital-induced sleep behaviors and rapid eye movement sleep in rodents. *Nat. Prod. Sci.* **22**(4), 263 (2016).
3. Wang, L., Wang, Y., Chen, Y., *et al.* Rhynchophylline ameliorates cerebral ischemia by improving the synaptic plasticity in a middle cerebral artery occlusion induced stroke model *Eur. J. Pharmacol.* **940**, 175390 (2023).
4. Jiang, P., Chen, L., Xu, J., *et al.* Neuroprotective effects of rhynchophylline against A β ₁₋₄₂-induced oxidative stress, neurodegeneration, and memory impairment via Nrf2-ARE activation. *Neurochem. Res.* **46**(9), 2439-2450 (2021).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 02/15/2023

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM