



**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](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](http://linkedin.com/company/szaboscandic)



# PRODUCT INFORMATION



## Talatisamine

Item No. 27721

CAS Registry No.: 20501-56-8

Formal Name: 20-ethyl-1 $\alpha$ ,16 $\beta$ -dimethoxy-4-(methoxymethyl)-aconitane-8,14 $\alpha$ -diol

MF: C<sub>24</sub>H<sub>39</sub>NO<sub>5</sub>

FW: 421.6

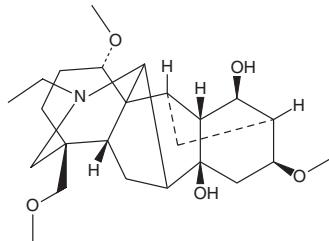
Purity: ≥98%

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥2 years

Item Origin: Plant/Aconitum *tenuifolia*



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

### Laboratory Procedures

Talatisamine is supplied as a crystalline solid. A stock solution may be made by dissolving the talatisamine in the solvent of choice. Talatisamine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of talatisamine in these solvents is approximately 10, 2, and 1 mg/ml, respectively.

### Description

Talatisamine is a diterpene alkaloid originally isolated from *A. talassicum* and has diverse biological activities.<sup>1-5</sup> It blocks delayed rectifier potassium (I<sub>K</sub>) current in rat hippocampal neurons (IC<sub>50</sub> = 146 μM).<sup>3</sup> Talatisamine reduces increases in I<sub>K</sub> current and cytotoxicity in primary rat cortical neurons induced by amyloid-β (1-40) (Aβ40; Item No. 21617).<sup>4</sup> It inhibits barium chloride-induced contractions in isolated rat intestines (EC<sub>50</sub> = 200 μM).<sup>2</sup> Talatisamine exhibits feeding deterrent activity against red flour beetle (*T. castaneum*) adults (EC<sub>50</sub> = 342.8 ppm).<sup>5</sup>

### References

1. Konovalova, R.A. and Orekhov, A.P. Aconite alkaloids. I. Alkaloids of *aconitum talassicum*. *B. Soc. Chim. Fr.* **7**, 95-105 (1940).
2. Dzhakhangirov, F.N., Tursunkhodzhaeva, F.M., Sultankhodzhaev, M.N., et al. Spasmolytic activity of diterpenoid alkaloids and their derivatives. Structure-activity relationship. *Chem. Nat. Compd.* **49**(4), 702-706 (2013).
3. Song, M.K., Liu, H., Jiang, H.L., et al. Discovery of talatisamine as a novel specific blocker for the delayed rectifier K<sup>+</sup> channels in rat hippocampal neurons. *Neuroscience* **155**(2), 469-475 (2008).
4. Wang, Y., Song, M., Hou, L., et al. The newly identified K<sup>+</sup> channel blocker talatisamine attenuates beta-amyloid oligomers induced neurotoxicity in cultured cortical neurons. *Neurosci. Lett.* **518**(2), 122-127 (2012).
5. Liu, Z.L., Cao, J., Zhang, H.M., et al. Feeding deterrents from *Aconitum episcopale* roots against the red flour beetle, *Tribolium castaneum*. *J. Agric. Food Chem.* **59**(8), 3701-3706 (2011).

#### 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.

### 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