

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 in



PRODUCT INFORMATION



α-Conotoxin AulB (trifluoroacetate salt)

Item No. 33795

Formal Name: cyclic $(2\rightarrow 8)$, $(3\rightarrow 15)$ -bis(disulfide),

> glycyl-L-cysteinyl-L-cysteinyl-Lseryl-L-tyrosyl-L-prolyl-L-prolyl-Lcysteinyl-L-phenylalanyl-L-alanyl-L-threonyl-L-asparaginyl-L-prolyl-

L-α-aspartyl-L-cysteinamide,

trifluoroacetate salt

GCCSYPPCFATNPDC Synonym:

MF: $C_{65}H_{89}N_{17}O_{21}S_4 \bullet XCF_3COOH$

FW: **Purity:** ≥95% Supplied as: A solid Storage: -20°C Stability: ≥2 years

Thr-Asn-Pro-Asp-Cys-NH₂ • XCF₂COOH

H-Gly-Cys-Cys-Ser-Tyr-Pro-Pro-Cys-Phe-Ala-

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

Laboratory Procedures

α-Conotoxin AuIB (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the α -conotoxin AuIB (trifluoroacetate salt) in water. The solubility of α -conotoxin AuIB (trifluoroacetate salt) in water is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

α-Conotoxin AuIB is a conotoxin that has been found in C. aulicus and has receptor antagonist and analgesic activity. It is a peptide antagonist of α3β4 subunit-containing nicotinic acetylcholine receptors (nAChRs; $IC_{50} = 0.75 \mu M$). It is greater than 100-fold selective for $\alpha 3\beta 4$ subunit-containing nAChRs over those containing $\alpha 2\beta 2$, $\alpha 2\beta 4$, $\alpha 3\beta 2$, $\alpha 4\beta 2$, $\alpha 4\beta 4$, or $\alpha 1\beta 1\gamma \delta$ subunits but does inhibit homomeric $\alpha 7$ nAChRs by 34% at 3 μ M. Intrathecal administration of α -conotoxin AuIB (0.2 and 2 nmol/animal) reduces mechanical allodynia in a rat model of neuropathic pain induced by partial sciatic nerve ligation.² It also reverses somatic signs of withdrawal in a mouse model of morphine withdrawal when administered intracerebroventricularly at doses of 1.75 and 3.5 pmol/animal.3

References

- 1. Luo, S., Kulak, J.M., Cartier, G.E., et al. α-Conotoxin AulB selectively blocks α3 β4 nicotinic acetylcholine receptors and nicotine-evoked norepinephrine release. J. Neurosci. 18(21), 8571-8579 (1998).
- 2. Napier, I.A., Klimis, H., Rycroft, B.K., et al. Intrathecal α-conotoxins Vc1.1, AulB and MII acting on distinct nicotinic receptor subtypes reverse signs of neuropathic pain. Neuropharmacology 62(7), 2202-2207 (2012).
- 3. Muldoon, P.P., Jackson, K.J., Perez, E., et al. The α3β4* nicotinic ACh receptor subtype mediates physical dependence to morphine: mouse and human studies. Br. J. Pharmacol. 171(16), 3845-3857 (2014).

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

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.

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, 07/12/2021

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