

PRODUCT INFORMATION



ω -Agatoxin IVA (trifluoroacetate salt)

Item No. 21605

Formal Name: ω -agatoxin IVA, 2,2,2-trifluoroacetate

Synonyms: ω -Aga IVa, SNX-290

MF: $C_{217}H_{360}N_{68}O_{60}S_{10} \cdot CF_3COOH$

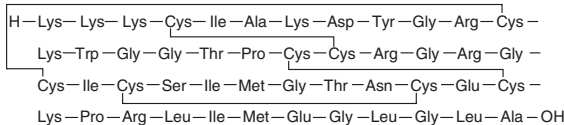
FW: 5,316.3

Purity: $\geq 95\%$

Supplied as: A solid

Storage: $-20^{\circ}C$

Stability: ≥ 4 years



$\cdot CF_3COOH$

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

Laboratory Procedures

ω -Agatoxin IVA (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the ω -agatoxin IVA (trifluoroacetate salt) in water. The solubility of ω -agatoxin IVA (trifluoroacetate salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

ω -Agatoxin IVA is a natural peptide first isolated from the venom of funnel spiders.¹ It selectively and irreversibly blocks P-type calcium channels ($IC_{50} < 1$ nM), high voltage-activated channels first discovered in Purkinje cells.^{2,3} ω -Agatoxin IVA also blocks N-type calcium channels at micromolar concentrations.³

References

1. Mintz, I.M., Venema, V.J., Swiderek, K.M., *et al.* P-type calcium channels blocked by the spider toxin omega-Aga-IVA. *Nature* **355**(6363), 827-829 (1992).
2. Mori, Y., Mikala, G., Varadi, G., *et al.* Molecular pharmacology of voltage-dependent calcium channels. *Jpn. J. Pharmacol.* **72**(2), 83-109 (1996).
3. Tringham, E.W., Dupere, J.R.B., Payne, C.E., *et al.* Protease treatment of cerebellar Purkinje cells renders ω -agatoxin IVA-sensitive Ca^{2+} channels insensitive to inhibition by ω -conotoxin GVIA. *J. Pharmacol. Exp. Ther.* **324**(2), 806-814 (2008).

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, 12/01/2022

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