PRODUCT INFORMATION



Tyr-α-CGRP (human) (trifluoroacetate salt)

Item No. 24724

CAS Registry No.: 124756-98-5

Formal Name:

N-L-tyrosyl-α-calcitonin gene-related peptide (human),
H-Tyr-Ala-Cys-Asp-Thr-Ala-Thr-Cys-Val-Thrtrifluoroacetate salt

Synonym: [Tyr⁰]-CGRP (human) His -Arg-Leu-Ala-Gly-Leu-Leu-Ser-Arg-Ser-

MF: $C_{172}H_{276}N_{52}O_{51}S_2 \bullet XCF_3COOH$ Gly-Gly-Val-Val-Lys-Asn-Asn-Phe-Val-Pro-FW: 3,952.5

Thr-Asn-Val-Gly-Ser-Lys-Ala-Phe-NH₂ **Purity:** ≥95%

Supplied as: A lyophilized powder • XCF₃COOH

Storage: -20°C Stability: ≥4 years

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

Laboratory Procedures

Tyr-α-CGRP (human) (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the Tyr-α-CGRP (human) (trifluoroacetate salt) in water. The solubility of Tyr- α -CGRP (human) (trifluoroacetate salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Tyr-α-CGRP is an N-terminal extended tyrosinated analogue of α-calcitonin gene-related peptide (α-CGRP; Item No. 24405).¹ It binds to amylin receptors AMY₁ and AMY₃ in COS-7 cells expressing the human receptors (IC_{50} s = 141 and 1.86 nM, respectively).² Tyr- α -CGRP also binds to and stimulates cAMP accumulation in rat L6 myocytes (IC_{50} = 4 nM; EC_{50} = 12 nM).¹ It also binds to rat brain and spleen membrane preparations (IC_{50} s = 0.2 and 0.5 nM, respectively), induces positive chronotropic and inotropic effects in isolated right and left guinea pig atria (EC_{50} s = 282 and 74 nM, respectively), and inhibits the twitch response in rat vas deferens ($EC_{50} = 1.9 \text{ nM}$).³

References

- 1. Poyner, D.R., Andrew, D.P., Brown, D., et al. Pharmacological characterization of a receptor for calcitonin gene-related peptide on rat, L6 myocytes. Br. J. Pharmacol. 105(2), 441-447 (1992).
- Hay, D.L., Christopoulos, G., Christopoulos, A., et al. Pharmacological discrimination of calcitonin receptor: Receptor activity-modifying protein complexes. Mol. Pharmacol. 67(5), 1655-1665 (2005).
- Dennis, T., Fournier, A., St. Pierre, S., et al. Structure-activity profile of calcitonin gene-related peptide in peripheral and brain tissues. Evidence for receptor multiplicity. J. Pharmacol. Exp. Ther. 251(2), 718-725 (1989).

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.

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