

PRODUCT INFORMATION



R 715 (trifluoroacetate salt)

Item No. 36890

Formal Name: N²-acetyl-L-lysyl-L-arginyl-L-prolyl-L-prolylglycyl-L-phenylalanyl-L-seryl-3-(2-naphthalenyl)-D-alanyl-L-isoleucine, trifluoroacetate salt

Synonyms: Ac-Lys-Arg-Pro-Pro-Gly-Phe-Ser-D2NaI-Ile-OH, [Ac-Lys-[D-βNaI⁷,Ile⁸]des-Arg⁹]-BK

Peptide Sequence: Ac-KRPPGFSXI-OH (X = (2-naphthalenyl)-D-alanyl)

MF: C₅₇H₈₁N₁₃O₁₂ • XCF₃COOH

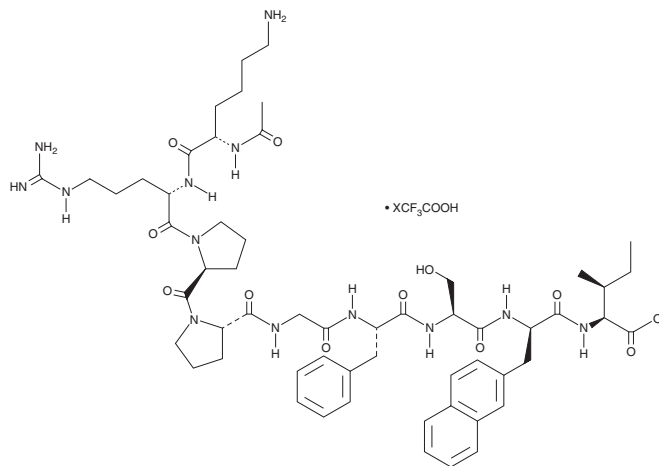
FW: 1,140.3

Purity: ≥95%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

R 715 (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the R 715 (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. R 715 (trifluoroacetate salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of R 715 (trifluoroacetate salt) in ethanol is approximately 20 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of R 715 (trifluoroacetate salt) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of R 715 (trifluoroacetate salt) in PBS (pH 7.2) is approximately 5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

R 715 is a bradykinin B₁ receptor antagonist.¹ It inhibits contractions induced by bradykinin (Item No. 37408) in isolated human umbilical cords, which express bradykinin B₁ receptors (pA₂ = 8.49). R 715 (200, 400, and 600 μg/kg) decreases the latency to tail withdrawal in the tail-flick test in a mouse model of diabetic neuropathy induced by streptozotocin (STZ; Item No. 13104).² It reduces the incidence of hind limb weakness and paralysis, improves symmetrical gait, as well as decreases spinal inflammatory foci numbers, neuron demyelination, and lesion monocyte invasion, in a myelin oligodendrocyte glycoprotein (MOG) (35-55) (MOG₃₅₋₅₅) antigen peptide-induced mouse model of experimental autoimmune encephalomyelitis (EAE) when administered at a dose of 1 mg/kg per day.³ R 715 (0.01 nmol/animal, i.c.v.) reduces mean arterial blood pressure and increases heart rate in spontaneously hypertensive rats.⁴

References

1. Gobeil, F., Neugebauer, W., Filteau, C., et al. *Hypertension* **28**(5), 833-839 (1996).
2. Gabra, B.H. and Sirois, P. *Eur. J. Pharmacol.* **457**(2-3), 115-124 (2002).
3. Göbel, K., Pankratz, S., Schneider-Hohendorf, T., et al. *J. Autoimmun.* **36**(2), 106-114 (2011).
4. Emanuelli, C., Chao, J., Regoli, D., et al. *Br. J. Pharmacol.* **126**(8), 1769-1776 (1999).

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.

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