

PRODUCT INFORMATION



K 41498 (trifluoroacetate salt)

Item No. 36417

Formal Name: D-phenylalanyl-L-histidyl-L-leucyl-L-leucyl-L-arginyl-L-lysyl-L-norleucyl-L-isoleucyl-L- α -glutamyl-L-isoleucyl-L- α -glutamyl-L-lysyl-L-glutamyl-L- α -glutamyl-L-lysyl-L- α -glutamyl-L-lysyl-L-glutamyl-L-glutamyl-L-alanyl-L-alanyl-L-asparagyl-L-asparagyl-L-arginyl-L-leucyl-L-leucyl-L-leucyl-L- α -aspartyl-L-threonyl-L-isoleucinamide, trifluoroacetate salt

Peptide Sequence: FHLLRKXIEIEKQEKEKQQAANNRLLDIT-NH₂

MF: C₁₆₂H₂₇₆N₄₈O₄₆ • XCF₃COOH

FW: 3,632.2

Purity: ≥95%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

H — D-Phe — His — Leu — Leu — Arg — Lys — Nle — Ile — Glu — Ile —

Glu — Lys — Gln — Glu — Lys — Glu — Lys — Gln — Gln — Ala —

Ala — Asn — Asn — Arg — Leu — Leu — Leu — Asp — Thr — Ile — NH₂

• XCF₃COOH

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

Laboratory Procedures

K 41498 (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the K 41498 (trifluoroacetate salt) in water. We do not recommend storing the aqueous solution for more than one day.

Description

K 41498 is a peptide antagonist of corticotropin-releasing factor receptor 2 α (CRF_{2 α}) and CRF_{2 β} (K_is = 0.66 and 0.62 nM, respectively, in HEK293 cells expressing the human receptors).¹ It is selective for CRF_{2 α} and CRF_{2 β} over CRF₁ (K_i = 425 nM in HEK293 cells expressing the human receptor). K 41498 (1.84 μ g/animal, i.v.) prevents hypotension induced by urocortin (Item No. 24745) in rats. Intrathecal administration of K 41498 (0.075-0.5 μ mol/animal) decreases the mechanical paw withdrawal threshold in a rat model of nociception induced by complete Freund's adjuvant.²

References

1. Lawrence, A.J., Krstew, E.V., Dautzenberg, F.M., *et al.* The highly selective CRF₂ receptor antagonist K41498 binds to presynaptic CRF₂ receptors in rat brain. *Br. J. Pharmacol.* **136**(6), 896-904 (2002).
2. Mousa, S.A., Shaqura, M., Khalefa, B.I., *et al.* Functional and anatomical characterization of corticotropin-releasing factor receptor subtypes of the rat spinal cord involved in somatic pain relief. *Mol. Neurobiol.* **58**(11), 5459-5472 (2021).

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

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