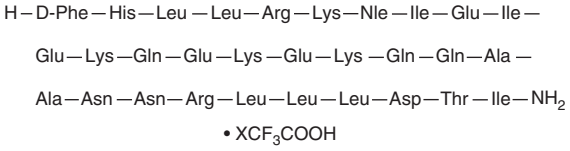
PRODUCT INFORMATION

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-glutaminyl-L-α-glutamyl-L-lysyl-L-α-glutamyl-L-lysyl-L-glutaminyl-L-glutaminyl-L-alanyl-L-alanyl-L-asparaginyl-L-asparaginyl-L-arginyl-L-leucyl-L-leucyl-L-leucyl-L-α-aspartyl-L-threonyl-L-isoleucinamide, trifluoroacetate salt

Peptide Sequence: FHLLRKXIEIEKQEKEKQQAANNRLLLDTI-NH_2



MF: $C_{162}H_{276}N_{48}O_{46}$ • XCF_3COOH

FW: 3,632.2

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

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 2α ($CRF_{2α}$) and $CRF_{2β}$ (K_is = 0.66 and 0.62 nM, respectively, in HEK293 cells expressing the human receptors).[1] It is selective for $CRF_{2α}$ and $CRF_{2β}$ over CRF_1 (K_i = 425 nM in HEK293 cells expressing the human receptor). K 41498 (1.84 µg/animal, i.v.) prevents hypotension induced by urocortin (Item No. 24745) in rats. Intrathecal administration of K 41498 (0.075-0.5 µmol/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 CRF_2 receptor antagonist K41498 binds to presynaptic CRF_2 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).

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