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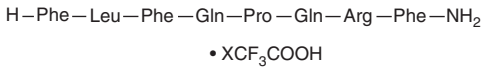
PRODUCT INFORMATION

Neuropeptide FF (trifluoroacetate salt)

Item No. 24548

CAS Registry No.: 99566-27-5
Formal Name: L-phenylalanyl-L-leucyl-L-phenylalanyl-L-glutaminyl-L-prolyl-L-glutaminyl-L-arginyl-L-phenylalaninamide, trifluoroacetate salt
Synonym: NPFF
MF: $C_{54}H_{76}N_{14}O_{10} \bullet XCF_3COOH$
FW: 1,081.3
Purity: ≥95%
Supplied as: A lyophilized powder
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

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

Description

NPFF is a peptide expressed in the brain and spinal cord that shares a precursor protein with neuropeptide AF.[1] NPFF is expressed primarily in the posterior pituitary, hypothalamus, and medulla. It is an agonist at NPFF1 and NPFF2 receptors (K_is = 2.82 and 0.21 nM, respectively, for human recombinant receptors) that inhibits forskolin-induced cAMP production in CHO cells (EC_{50}s = 236 and 2.3 nM, respectively).[2] NPFF activates parvocellular neurons in the paraventricular nucleus (PVN) of the hypothalamus to stimulate oxytocin release from their projections in the brain stem, thereby regulating baroreflex control of heart rate.[3] However, it inhibits magnocellular PVN neurons by enhancing GABAergic input. It is also found in plasma and exogenous administration briefly increases mean arterial pressure (MAP) by 40 mm Hg in rats, an effect that is only partially blocked by the norepinephrine competitor guanethidine (Item No. 16217) and the α_1-adrenergic receptor antagonist prazosin (Item No. 15023).[4] NPFF has anti-opioid effects in rodent models, inhibiting morphine-induced analgesia and inducing abstinence in morphine-tolerant rats.[1,5] It also inhibits acquisition of conditioned place preference to cocaine in rats when administered at doses of 10 and 20 nmol.[6]

References

1. Panula, P., Aarnisalo, A.A., and Wasowicz, K. *Prog. Neurobiol.* **48(4-5)**, 461-487 (1996).
2. Mollereau, C., Mazarguil, H., Marcus, D., *et al. Eur. J. Pharmacol.* **451(3)**, 245-256 (2002).
3. Jhamandas, J.H. and Goncharuk, V. *Front. Endocrinol. (Lausanne)* **4:8** (2013).
4. Roth, B.L., Disimone, J., Majane, E.A., *et al. Neuropeptides* **10(1)**, 37-42 (1987).
5. Liu, Q., Guan, X.-M., Martin, W.J., *et al. J. Biol. Chem.* **276(40)**, 36961-36969 (2001).
6. Kotlinska, J., Pachuta, A., and Silberring, J. *Peptides* **29(6)**, 933-939 (2008).

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