

Product Data Sheet

Product Name: Urotensin I TFA

Cat. No.: GC61583

Chemical Properties

Cas. No.

Formula $C_{212}H_{341}F_3N_{62}O_{69}S_2$ M.Wt 4983.48

Solubility Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure

NDDPPISIDLTFHLLRNMIEMARIENEREQAGLNRYLDEV-NH₂ (TFA salt)

Background

Urotensin I (Catostomus urotensin I) TFA, a CRF-like neuropeptide, acts as an agonist of CRF receptor with pEC₅₀s of 11.46, 9.36 and 9.85 for human CRF1, human CRF2 and rat CRF2α receptors in CHO cells, and K_is of 0.4, 1.8, and 5.7 nM for hCRF1, rCRF2α and mCRF2β receptors, respectively[1][2].

Urotensin I is 2-3 times more potent than CRF or sauvagine in stimulating ACTH release from a superfused goldfish anterior pituitary cell column[3]. Rat tail artery strips were incubated in the presence of 4 x 10⁻³ M theophylline and Urotensin I (UI). At the concentrations of 1.50, 7.50 mU/ml

Caution: Product has not been fully validated for medical applications. For research use only.

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but not of 0.75 mU/ml Urotensin I, the content of cAMP increased significantly[4].

Intraperitoneal injections of urotensin I, a CRF-like neuropeptide isolated from the caudal neurosecretory system of the teleost *Catostomus commersoni*, ovine CRF and sauvagine all produced significant increases in circulating levels of plasma cortisol in goldfish in which endogenous ACTH secretion was suppressed with betamethasone[3].

[1]. Smart D, et al. Characterisation using microphysiometry of CRF receptor pharmacology. *Eur J Pharmacol.* 1999 Aug 27;379(2-3):229-35. [2]. Reul JM, et al. Corticotropin-releasing factor receptors 1 and 2 in anxiety and depression. *Curr Opin Pharmacol.* 2002 Feb;2(1):23-33. [3]. Fryer J, et al. Urotensin I, a CRF-like neuropeptide, stimulates acth release from the teleost pituitary. *Endocrinology.* 1983;113(6):2308-2310. [4]. Gerritsen ME, et al. Urotensin I effects on intracellular content of cyclic AMP in the rat tail artery. *Eur J Pharmacol.* 1979;60(2-3):211-220.

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