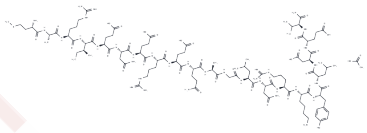
Data Sheet (Cat.No.TP1199L)

TargetMol

Urotensin I acetate (83930-33-0 Free base)

Chemical Properties



CAS No. :

Formula:

Molecular Weight:

Storage: Keep away from moisture,Store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Urotensin I acetate, 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 Kis of 0.4, 1.8, and 5.7 nM for hCRF1, rCRF2α and mCRF2β receptors, respectively[1][2].
Targets(IC50)	CRFR
In vitro	Urotensin I acetate 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 acetate. At the concentrations of 1.50, 7.50 mU/ml but not of 0.75 mU/ml Urotensin I acetate, the content of cAMP increased significantly[4].
In vivo	Intraperitoneal injections of urotensin I acetate, 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]

Reference

Smart D, et al. Characterisation using microphysiometry of CRF receptor pharmacology. Eur J Pharmacol. 1999 Aug 27;379(2-3):229-35.

Reul JM, et al. Corticotropin-releasing factor receptors 1 and 2 in anxiety and depression. Curr Opin Pharmacol. 2002 Feb;2(1):23-33.

Fryer J, et al. Urotensin I, a CRF-like neuropeptide, stimulates acth release from the teleost pituitary. Endocrinology. 1983;113(6):2308-2310.

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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