Urocortin II, mouse

Cat. No.:	HY-P2847
CAS No.:	330648-32-3
Molecular Formula:	$C_{187}H_{320}N_{56}O_{50}$
Molecular Weight:	4152.96
Sequence:	Val-Ile-Leu-Ser-Leu-Asp-Val-Pro-Ile-Gly-Leu-Leu-Arg-Ile-Leu-Leu-Glu-Gln-Ala-Arg-Tyr-Lys-Ala-Ala-Arg-Asn-Gln-Ala-Ala-Thr-Asn-Ala-Gln-Ile-Leu-Ala-His-Val-NH2
Sequence Shortening:	VILSLDVPIGLLRILLEQARYKAARNQAATNAQILAHV-NH2
Target:	CRFR
Pathway:	GPCR/G Protein
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description

Urocortin II, mouse is a potent and selective endogenous peptide agonist of type-2 corticotropin-releasing factor (CRF2) receptor with K_i values of 0.66 nM and ⊠100 nM for CRFR2 and CRFR1, respectively. Urocortin II, mouse activates CRF2 receptors in a cAMP/PKA- and Ca^{2+}/CaMKII-dependent manner.Urocortin II, mouse is expressed in discrete areas of the central nervous system, and activates central neurons involved in the processing of visceral sensory information, and in modulating autonomic outflow[1][2][3].

IC_{50} & Target

CRFR2	CRFR1
0.66 nM (Ki)	⊠100 nM (Ki)

In Vitro

Urocortin II, mouse elicits positive inotropic and positive lusitropic effects in mouse ventricular myocytes via activation of CRF2 receptors[1].

Urocortin II, mouse activates CRF2 receptors in a cAMP/PKA- and Ca^{2+}/CaMKII-dependent manner[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Urocortin II, mouse (1-10 μg; icv and i.v.; Adult male Sprague-Dawley rats) induces the expression of Fos[2].

Urocortin II, mouse (1 μg; icv; Adult male Sprague-Dawley rats) is involved in central autonomic nervous system and appetite control[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Adult male Sprague-Dawley rats (250-300 g)[2]
Dosage:	1, 5, and 10 μg
Administration:	Intracerebroventrical injection and intravenous injection; 1, 5, or 10 μg per animal in 2 μL of saline for i.c.v. injections or 200 μL for i.v. administration
Result:	Induced Fos expression in a dose-dependent manner.

Animal Model:	Adult male Sprague-Dawley rats (250-300 g)[2]

Dosage:	1 μg
Administration:	Intracerebroventrical injection
Result:	Reduced food intake over the 12-h interval.

REFERENCES

[1]. Yang LZ, et, al. cAMP- and Ca^2(+) /calmodulin-dependent protein kinases mediate inotropic, lusitropic and arrhythmogenic effects of urocortin 2 in mouse ventricular myocytes. Br J Pharmacol. 2011 Jan;162(2):544-56.

[2]. Reyes TM, et, al. Urocortin II: a member of the corticotropin-releasing factor (CRF) neuropeptide family that is selectively bound by type 2 CRF receptors. Proc Natl Acad Sci U S A. 2001 Feb 27;98(5):2843-8.

[3]. Reyes TM, et, al. Urocortin II: a member of the corticotropin-releasing factor (CRF) neuropeptide family that is selectively bound by type 2 CRF receptors. Proc Natl Acad Sci U S A. 2001 Feb 27;98(5):2843-8.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA