Urotensin II, mouse

Cat. No.:	HY-P1483
CAS No.:	405137-01-1
Molecular Formula:	$C_{76}H_{100}N_{18}O_{19}S_2$
Molecular Weight:	1633.85
Sequence:	{pGlu}-His-Gly-Ala-Ala-Pro-Glu-Cys-Phe-Trp-Lys-Tyr-Cys-Ile (Disulfide bridge: Cys8-Cys13)
Sequence Shortening:	{pGlu}-HGAAPECFWKYCI (Disulfide bridge: Cys8-Cys13)
Target:	Urotensin Receptor
Pathway:	GPCR/G Protein
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	Urotensin II, mouse is an endogenous ligand for the orphan G-protein-coupled receptor GPR14 or SENR. Urotensin II, mouse is a potent vasoconstrictor. Urotensin II, mouse plays a physiological role in the central nervous system[1].
IC_{50} & Target	GPR14[1]
In Vitro	This sequence of the C-terminus cyclic region of Urotensin II (U-II) is completely conserved in most species, including in the fish, frog, human, porcine, rat, and mouse, and it is thought to be essential for the agonistic activity of U-II. Urotensin II plays a physiological role in the central nervous system. Intracerebroventricular administration of Urotensin II induces anxiogenic-like behaviors in the elevated plus maze test and the hole-board test in mice in a dose-dependent manner, as do corticotropin releasing factor (CRF). The effective doses of Urotensin II are 10-100-fold higher than these of CRF in these tests [1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Urotensin II is a somatostatin-like cyclic peptide which functions as an arterial vasocontrictor, vasodilator, and bronchoconstriction mediator[1]. Urotensin II (0.1 nmol, 0.3 nmol, and 3 nmol; intracerebroventricular administration) induces anxiogenic-like behaviors in the elevated plus maze test and the hole-board test in mice in a dose-dependent manner[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Male C57BL/6N mice (8 weeks old)[1]
Dosage:	0.1 nmol, 0.3 nmol, and 3 nmol
Administration:	Intracerebroventricular (i.c.v.) administration
Result:	Decreased the amount of head dipping without significant alteration of the motor activity.

REFERENCES

[1]. Matsumoto Y, et al. Intracerebroventricular administration of urotensin II promotes anxiogenic-like behaviors in rodents. Neurosci Lett. 2004 Mar 25;358(2):99-102.

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