Urotensin II (114-124), human TFA

Cat. No.: HY-P1164A

Molecular Formula: $C_{66}H_{86}F_3N_{13}O_{20}S_2$

Molecular Weight: 1502.59

Sequence: Glu-Thr-Pro-Asp-Cys-Phe-Trp-Lys-Tyr-Cys-Val (Disulfide bridge: Cys5-Cys7)

Sequence Shortening: ETPDCFWKYCV (Disulfide bridge: Cys5-Cys7)

Target: Urotensin Receptor

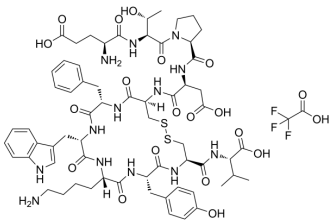
Pathway: GPCR/G Protein

Storage: Sealed storage, away from moisture

Powder -80°C 2 years

-20°C 1 year

* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

H_2O : 100 mg/mL (66.55 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	0.6655 mL	3.3276 mL	6.6552 mL
	5 mM	0.1331 mL	0.6655 mL	1.3310 mL
	10 mM	0.0666 mL	0.3328 mL	0.6655 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: PBS
   Solubility: 100 mg/mL (66.55 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

Urotensin II (114-124), human TFA, an 11-amino acid residue peptide, is a potent vasoconstrictor and agonist for the orphan receptor GPR14.

IC_{50} & Target

GPR14[1]

In Vitro

Human Urotensin II (U-II) binds to recombinant human GPR14 with high affinity, and the binding is functionally coupled to calcium mobilization. Human Urotensin II induces concentration-dependent increases in intracellular calcium in a HEK-293 cell line expressing human GPR14 (EC_{50}=0:62±0.17 nM, n=6)[1].

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

In Vivo

Human Urotensin II (U-II) markedly increases total peripheral resistance in anaesthetized non-human primates, a response

	associated with profound cardiac contractile dysfunction[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Ames RS, et al. Human urotensin-II is a potent vasoconstrictor and agonist for the orphan receptor GPR14. Nature. 1999 Sep 16;401(6750):282-6.

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