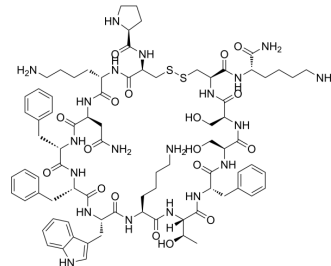


Cortistatin-14

Cat. No.:	HY-P1932
CAS No.:	186901-48-4
Molecular Formula:	C ₈₁ H ₁₁₄ N ₂₀ O ₁₈ S ₂
Molecular Weight:	1720.03
Sequence:	{Pro}{Cys}{Lys}{Asn}{Phe}{Phe}{Trp}{Lys}{Thr}{Phe}{Ser}{Ser}{Cys}{Lys}-NH ₂ (Disulfide bridge: Cys2-Cys13)
Sequence Shortening:	PCKNFFWKTFSCK-NH ₂ (Disulfide bridge: Cys2-Cys13)
Target:	Somatostatin Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
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 ₂ O : 50 mg/mL (29.07 mM; Need ultrasonic)					
		Solvent Concentration	Mass			
	Preparing Stock Solutions			1 mg	5 mg	10 mg
		1 mM		0.5814 mL	2.9069 mL	5.8139 mL
		5 mM		0.1163 mL	0.5814 mL	1.1628 mL
	10 mM		0.0581 mL	0.2907 mL	0.5814 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 (58.14 mM); Clear solution; Need ultrasonic					

BIOLOGICAL ACTIVITY

Description	Cortistatin-14, a neuropeptide have structural similarity to somatostatin-14, binds and exerts its function via the somatostatin receptors (sst1-sst5). Cortistatin-14 shows anticonvulsive, neuroprotective effect and remarkable anti-inflammatory properties ^{[1][2][3][4]} .
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REFERENCES

[1]. De Lecea L, et al. A cortical neuropeptide with neuronal depressant and sleep-modulating properties. Nature. 1996 May 16;381(6579):242-5.

[2]. Baranowska B, et al. Cortistatin and pituitary hormone secretion in rat. *J Physiol Pharmacol.* 2009 Mar;60(1):151-6.

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[4]. Markovics A, et al. Comparison of the anti-inflammatory and anti-nociceptive effects of cortistatin-14 and somatostatin-14 in distinct in vitro and in vivo model systems. *J Mol Neurosci.* 2012 Jan;46(1):40-50.

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

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