# **Neuromedin N**

**Cat. No.:** HY-P0079

CAS No.: 92169-45-4 Molecular Formula:  $C_{38}H_{63}N_7O_8$  Molecular Weight: 745.95

Sequence: Lys-Ile-Pro-Tyr-Ile-Leu

Sequence Shortening: KIPYIL

Target: Dopamine Receptor

Pathway: GPCR/G Protein; Neuronal Signaling
Storage: Sealed storage, away from moisture

Powder -80°C 2 years -20°C 1 year

-20°C 1 year

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

### **SOLVENT & SOLUBILITY**

In Vitro H<sub>2</sub>O: 50 mg/mL (67.03 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.3406 mL	6.7029 mL	13.4057 mL
	5 mM	0.2681 mL	1.3406 mL	2.6811 mL
	10 mM	0.1341 mL	0.6703 mL	1.3406 mL

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

In Vivo 1. Add each solvent one by one: PBS

Solubility: 50 mg/mL (67.03 mM); Clear solution; Need ultrasonic

### **BIOLOGICAL ACTIVITY**

Description	Neuromedin N is a potent modulator of dopamine D2 receptor agonist binding in rat neostriatal membranes.		
IC <sub>50</sub> & Target	Dopamine D2 receptor <sup>[1]</sup> .		
In Vitro	Neuromedin N competitively inhibits the binding of neurotensin to rat brain synaptic membranes with a 19-fold lower potency than neurotensin and is rapidly inactivated by brain synaptic peptidases <sup>[1]</sup> . It competitively inhibits neurotensin binding to rat brain synaptic membranes and has increased potency in the presence of the peptidase inhibitor bestatin <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.		

## **CUSTOMER VALIDATION**

- Cell Metab. 2021 Jul 6;33(7):1449-1465.e6.
- Cell Signal. 2018 Dec;52:147-154.

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#### **REFERENCES**

[1]. Li XM, et al. Neuromedin N is a potent modulator of dopamine D2 receptor agonist binding in rat neostriatal membranes. Neurosci Lett. 1993 Jun 11;155(2):121-4.

[2]. Checler F, et al. Neuromedin N: high affinity interaction with brain neurotensin receptors and rapid inactivation by brain synaptic peptidases. Eur J Pharmacol. 1986 Jul 31;126(3):239-44.

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

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