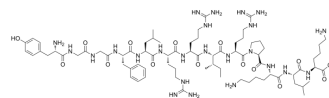


Porcine dynorphin A(1-13)

Cat. No.: HY-P0088
CAS No.: 72957-38-1
Molecular Formula: C₇₅H₁₂₆N₂₄O₁₅
Molecular Weight: 1603.95
Sequence: Tyr-Gly-Gly-Phe-Leu-Arg-Arg-Ile-Arg-Pro-Lys-Leu-Lys
Sequence Shortening: YGGFLRRIRPKLK
Target: Opioid 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

H₂O : ≥ 60 mg/mL (37.41 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
	Concentration				
	1 mM		0.6235 mL	3.1173 mL	6.2346 mL
	5 mM		0.1247 mL	0.6235 mL	1.2469 mL
	10 mM		0.0623 mL	0.3117 mL	0.6235 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 (62.35 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

Porcine dynorphin A (1-13) is a potent, endogenous κ opioid receptor agonist and is antinociceptive at physiological concentrations.

IC₅₀ & Target

κ Opioid Receptor/KOR

In Vivo

Dynorphin A (1-13) exposure (33 μM) causes a significant loss in neuronal viability at 4 h with a visible destruction in neuronal morphology seen at 16 h. Exposure to dynorphin A (1-13) causes acute increases in [Ca²⁺]_i in individual neurons similar to increases seen with acute NMDA treatment. Continuous exposure to dynorphin A (1-13) (100 μM) causes a

significant loss of neurons over time^[1].

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

REFERENCES

[1]. Hauser KF, et al. Dynorphin A (1-13) neurotoxicity in vitro: opioid and non-opioid mechanisms in mouse spinal cord neurons. *Exp Neurol*. 1999 Dec;160(2):361-75.

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

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