Dynorphin A (1-8)

Cat. No.: HY-P2159

CAS No.: 75790-53-3

Molecular Formula: $C_{46}H_{72}N_{14}O_{10}$

Molecular Weight: 981.15

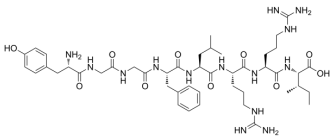
Sequence: Tyr-Gly-Gly-Phe-Leu-Arg-Arg-Ile

Sequence Shortening: YGGFLRRI

Target: Opioid Receptor; Endogenous Metabolite

Pathway: GPCR/G Protein; Neuronal Signaling; Metabolic Enzyme/Protease

Storage: Stored under nitrogen, away from moisture
Powder -80°C 2 years
-20°C 1 year
* In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

H_2O : 100 mg/mL (101.92 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.0192 mL	5.0961 mL	10.1921 mL
	5 mM	0.2038 mL	1.0192 mL	2.0384 mL
	10 mM	0.1019 mL	0.5096 mL	1.0192 mL

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

BIOLOGICAL ACTIVITY

Description

Dynorphin A (1-8) is the predominant opioid peptide identified in placental tissue extracts. Dynorphin A (1-8) is the most likely natural ligand of the kappa receptor. The binding of 3H-Bremazocine to the purified kappa receptor is inhibited by Dynorphin A (1-8) (IC_{50}=303 nM)[1][2].

IC_{50} & Target	κ Opioid Receptor/KOR	Human Endogenous Metabolite

REFERENCES

[1]. Agbas A, Ahmed MS, Millington W, et al. Dynorphin A(1-8) in human placenta: amino acid sequence determined by tandem mass spectrometry. Peptides. 1995;16(4):623-627.

[2]. Ahmed MS, Zhou DH, Cavinato AG, Maulik D. Opioid binding properties of the purified kappa receptor from human placenta. Life Sci. 1989;44(13):861-871.

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