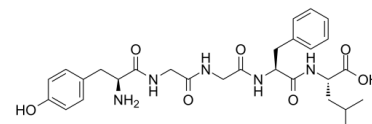


Data Sheet

Product Name:	[Leu5]-Enkephalin
Cat. No.:	CS-7037
CAS No.:	58822-25-6
Molecular Formula:	C ₂₈ H ₃₇ N ₅ O ₇
Molecular Weight:	555.62
Target:	Endogenous Metabolite; Opioid Receptor
Pathway:	GPCR/G Protein; Metabolic Enzyme/Protease; Neuronal Signaling
Solubility:	DMSO : ≥ 150 mg/mL (269.97 mM); H ₂ O : 100 mg/mL (179.98 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

[Leu5]-Enkephalin is a pentapeptides with morphine like properties. [Leu5]-Enkephalin is a five amino acid endogenous peptide that acts as an agonist at **opioid receptors**. IC₅₀ & Target: Opioid receptors^[1] **In Vitro:** Enkephalins (met-, leu-enkephalin, and enkephalin 8) and dynorphins are two classes of opioid peptides found in the spinal dorsal horn. Mu, delta, and kappa are three major subtypes of opioid receptors. Enkephalins are putative endogenous ligands for delta opioid receptors, and dynorphins are endogenous ligands for the kappa opioid receptors. Three receptor types resembling the vertebrate δ- and κ-type opioid receptors have been characterized pharmacologically in nervous tissues (e.g. K_i=18.9 nM for Leu-enkephalin) and localized by autoradiography at CHH terminals in the SG of *C. maenas*^[1]. Leucine-enkephalin is a pentapeptides with morphine like properties, naturally present in mammalian brain^[2].

References:

[1]. Leu-enkephalin is a five amino acid endogenous peptide that acts as an agonist at opioid receptors.

[2]. Meunier JC, et al. Binding of Leu5-enkephalin and Met5-enkephalin to a particulate fraction from rat cerebrum. FEBS Lett. 1977 May 15;77(2):209-13.

CAIndexNames:

L-Leucine, L-tyrosylglycylglycyl-L-phenylalanyl-

SMILES:

CC(C)[C@@H](C(=O)O)NC([C@H](CC1=CC=CC=C1)NC(CNC(CNC([C@H](CC2=CC=C(C=C2)O)N)=O)=O)=O)=O

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

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