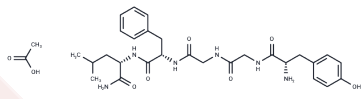
# Data Sheet (Cat.No.TP1113L)

TargetMol

## [Leu5]-Enkephalin, amide acetate

### Chemical Properties



CAS No. :

Formula: C30H42N6O8

Molecular Weight: 614.69

Storage: Keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

### Biological Description

| | |
|---|---|
| Description | [Leu5]-Enkephalin, amide acetate is a δ opioid receptor agonist. |
| Targets(IC50) | Opioid Receptor |
| In vitro | [Leu5]-Enkephalin causes concentration-dependent, reversible inhibition of pelvic nerve-evoked contractions, with an IC50 of 2.1 nM.[1] |
| In vivo | Levels of [Leu5]-Enkephalin are significantly increased in the nucleus raphe magnus (NRM) of rats 2 weeks after the injection of complete Freund's adjuvant (CFA) (1.02±0.2 pmol/mg protein) as compared with saline-treated rats (0.49±0.04 pmol/mg protein; p<0.01). Tissue levels of [Leu5]-Enkephalin are uniformly increased in the caudal ventrolateral periaqueductal gray (PAG) 4 hr (1.15±0.25 pmol/mg protein), 4 d (1.16±0. 18 pmol/mg protein), and 2 weeks (1.18±0.17 pmol/mg protein) after the injection of CFA as compared with saline-treated rats (0.55±0.03 pmol/mg protein; p<0.05, all times). A smaller increase in the levels of [Leu5]-Enkephalin occurred in the rostral aspect of the ventrolateral PAG at all time points. Finally, levels of [Leu5]-Enkephalin are also increased in the contralateral microcellular tegmental nucleus 4 d after the injection of CFA (0.53±0.04 pmol/mg protein) compared with levels in saline-treated rats (0.38±0.02 pmol/mg protein; p<0.05)[2]. |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 1.6268 mL | 8.1342 mL | 16.2684 mL |
| 5 mM | 0.3254 mL | 1.6268 mL | 3.2537 mL |
| 10 mM | 0.1627 mL | 0.8134 mL | 1.6268 mL |
| 50 mM | 0.0325 mL | 0.1627 mL | 0.3254 mL |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Kennedy C, et al. [Met5]enkephalin acts via delta-opioid receptors to inhibit pelvic nerve-evoked contractions of cat distal colon. Br J Pharmacol. 1987 Oct;92(2):291-8.

Hurley RW, et al. Contribution of endogenous enkephalins to the enhanced analgesic effects of supraspinal mu opioid receptor agonists after inflammatory injury. J Neurosci. 2001 Apr 1;21(7):2536-45.



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