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## Product Data Sheet

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Product Name: [Met5]-Enkephalin, amide (5-Methionine-enkephalin amide)  
Cat. No.: GC31138

### Chemical Properties

Cas. No. 60117-17-1

SMILES Tyr-Gly-Gly-Phe-Met-NH<sub>2</sub>

Formula C<sub>27</sub>H<sub>36</sub>N<sub>6</sub>O<sub>6</sub>S M.Wt 572.68

Solubility Soluble in DMSO Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure

### Background

[Met5]-Enkephalin, amide is an agonist for  $\delta$  opioid receptors as well as putative  $\zeta$  (zeta) opioid receptors.

[Met5]-Enkephalin at 0.1 nM, 10 nM, and 1  $\mu$ M significantly reduces the total number of glial cells in culture[1]. [Met5]-Enkephalin, amide acts via  $\delta$ -opioid receptor to inhibit pelvic nerve-evoked contractions of cat distal colon. [Met5]-enkephalin causes concentration-dependent, reversible inhibition of pelvic nerve-evoked contractions, with an IC<sub>50</sub> value of 2.2 nM. [Met5]enkephalin at a concentration (3 nM) which produces a large inhibition of neurogenic contractions, has no effect on contractions to exogenous acetylcholine[2].

[1]. Stiene-Martin A, et al. Glial growth is regulated by agonists selective for multiple opioid receptor types in vitro. J Neurosci Res. 1991 Aug;29(4):538-48. [2]. 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.

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA