# Data Sheet

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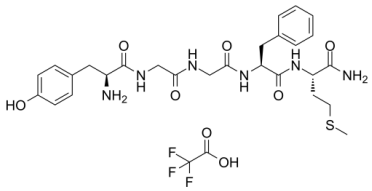
| **Product Name:** | [Met5]-Enkephalin, amide (TFA) |
| **Cat. No.:** | CS-0100517 |
| **Molecular Formula:** | C29H37F3N6O8S |
| **Molecular Weight:** | 686.70 |
| **Target:** | Opioid Receptor |
| **Pathway:** | GPCR/G Protein; Neuronal Signaling |
| **Solubility:** | H2O |



## BIOLOGICAL ACTIVITY:

[Met5]-Enkephalin, amide TFA is an agonist for **δ opioid receptors** as well as putative **ζ (zeta) opioid receptors**. IC50 & Target: δ and ζ opioid receptor[1] **In Vitro:** [Met5]-Enkephalin at 0.1 nM, 10 nM, and 1 μM significantly reduces the total number of glial cells in culture[1]. [Met5]-Enkephalin, amide acts via δ-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 $IC_{50}$ 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].

## References:

[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.

## CAIndexNames:

L-Methioninamide, L-tyrosylglycylglycyl-L-phenylalanyl- (TFA)

## SMILES:

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

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

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