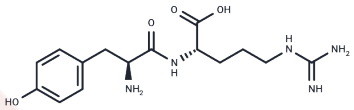
Data Sheet (Cat.No.T20172)

TargetMol

Kyotorphin

Chemical Properties



CAS No. : 70904-56-2

Formula: C15H23N5O4

Molecular Weight: 337.38

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	Kyotorphin is a Morphine-like dipeptide.
Targets(IC50)	Endogenous Metabolite,Antibacterial

Solubility Information

Solubility	DMSO: Soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.964 mL	14.8201 mL	29.6402 mL
5 mM	0.5928 mL	2.964 mL	5.928 mL
10 mM	0.2964 mL	1.482 mL	2.964 mL
50 mM	0.0593 mL	0.2964 mL	0.5928 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

Tsukahara T, Yamagishi S, Neyama H, Ueda H. Tyrosyl-tRNA synthetase: A potential kyotorphin synthetase in mammals. Peptides. 2018 Mar;101:60-68. doi: 10.1016/j.peptides.2017.12.026. Epub 2017 Dec 28. PubMed PMID: 29289698.

Bahamondes C, Wilson L, Guzmán F, Illanes A. Mathematical determination of kinetic parameters for assessing the effect of the organic solvent on the selectivity of peptide synthesis with immobilized α-chymotrypsin. J Biosci Bioeng. 2017 Dec;124(6):618-622. doi: 10.1016/j.jbiosc.2017.06.017. Epub 2017 Aug 25. PubMed PMID: 28847579.

Perazzo J, Lima C, Heras M, Bardají E, Lopes-Ferreira M, Castanho M. Neuropeptide Kyotorphin Impacts on Lipopolysaccharide-Induced Glucocorticoid-Mediated Inflammatory Response. A Molecular Link to Nociception, Neuroprotection, and Anti-Inflammatory Action. ACS Chem Neurosci. 2017 Aug 16;8(8):1663-1667. doi: 10.1021/acschemneuro.7b00007. Epub 2017 May 9. PubMed PMID: 28472878.

Figueira TN, Freire JM, Cunha-Santos C, Heras M, Gonçalves J, Moscona A, Porotto M, Salomé Veiga A, Castanho MA. Quantitative analysis of molecular partition towards lipid membranes using surface plasmon resonance. Sci Rep. 2017 Mar 30;7:45647. doi: 10.1038/srep45647. PubMed PMID: 28358389; PubMed Central PMCID: PMC5372468.