Data Sheet (Cat.No.TN6689)

TargetMol

Cyclo(Tyr-Phe)

Chemical Properties

CAS No. :	5147-17-1
Formula:	C18H18N2O3
Molecular Weight:	310.35
Storage:	Keep away from direct sunlight,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	Cyclo(Tyr-Phe) is a naturally occurring cyclic dipeptide (or diketopiperazine) formed from the amino acids Tyrosine (Tyr) and Phenylalanine. Cyclo(Tyr-Phe) is additionally applicable in biochemical and molecular research for studying cyclic dipeptide formation mechanisms and for investigating peptide-derived small molecule interactions in cellular signaling systems.
Targets(IC50)	Endogenous Metabolite
In vitro	To study the in vitro anticoagulant activity of cyclodipeptide(cyclo-(Tyr-Leu),cyclo-(PhePhe) and cyclo-(Phe-Tyr)) isolated from Sparganium stoloniferum Buch.-Ham. METHODS AND RESULTS:The special kits were used to measure anticoagulant activity with platelet poor plasma collected from abdominal aorta of male SD rats,including prothrombin time(PT),activated partial thromboplastin time(APTT) and thrombin time (TT).PT,APTT,TT were prolonged by the addition of cyclo-(Tyr-Leu),cyclo-(Phe-Phe) and Cyclo(Tyr-Phe). The former two presented no dose-effect relationship but the latter did. CONCLUSIONS:Of three cyclodipeptides from S. stoloniferum,all the three show anticoagulant activities with cyclo-(Phe-Tyr) being by far the most effective.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2222 mL	16.1108 mL	32.2217 mL
5 mM	0.6444 mL	3.2222 mL	6.4443 mL
10 mM	0.3222 mL	1.6111 mL	3.2222 mL
50 mM	0.0644 mL	0.3222 mL	0.6444 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

Tian J, Guan Y, Li Z, et al. Aged automobile cabin air filters as secondary pollution sources: mechanistic insights into NLRP3 inflammasome activation and discovery of a natural inhibitor. Part Fibre Toxicol. 2026;23(1):24.