Product Data Sheet

γ-Glu-Tyr

Cat. No.: HY-P4633 CAS No.: 7432-23-7 Molecular Formula: $C_{14}H_{18}N_2O_6$ Molecular Weight: 310.3 Sequence: $\{\gamma\text{-Glu}\}\text{-Tyr}$ Sequence Shortening: {γ-Glu}-Y

Dipeptidyl Peptidase Target:

Metabolic Enzyme/Protease Pathway:

Storage: Sealed storage, away from moisture and light

> -80°C Powder 2 years -20°C 1 year

* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture

and light)

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0		OH	
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$ar{N}H_2$		0	

SOLVENT & SOLUBILITY

In Vitro DMSO: 100 mg/mL (322.27 mM; Need ultrasonic)

H₂O: 12.5 mg/mL (40.28 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.2227 mL	16.1134 mL	32.2269 mL
	5 mM	0.6445 mL	3.2227 mL	6.4454 mL
	10 mM	0.3223 mL	1.6113 mL	3.2227 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (8.06 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (8.06 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (8.06 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

 γ -Glu-Tyr, a competitive inhibitor of dipeptidyl peptidase-IV (DPP-IV) (IC₅₀=6.77 mM), is a potentially functional component of the type 2 diabetes diet^[1].

IC₅₀ & Target DPP-4
6.77 mM (IC₅₀)

REFERENCES

[1]. Yang J, et al. γ -Glu-Met synthesised using a bacterial glutaminase as a potential inhibitor of dipeptidyl peptidase IV[J]. International Journal of Food Science & Technology, 2018, 53(5): 1166-1175.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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