H-Val-Pro-Pro-OH

Cat. No.: HY-114161

CAS No.: 58872-39-2

Molecular Formula: $C_{15}H_{25}N_3O_4$

Molecular Weight: 311.38

Target: Angiotensin Receptor

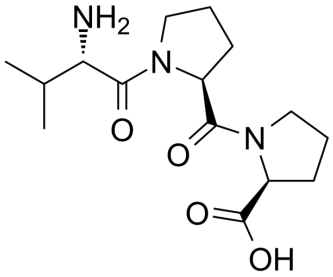
Pathway: GPCR/G Protein

Storage: Sealed storage, away from moisture and light

Powder -80°C 2 years

-20°C 1 year

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



SOLVENT & SOLUBILITY

In Vitro

DMSO : 12.5 mg/mL (40.14 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.2115 mL	16.0576 mL	32.1151 mL
	5 mM	0.6423 mL	3.2115 mL	6.4230 mL
	10 mM	0.3212 mL	1.6058 mL	3.2115 mL

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

BIOLOGICAL ACTIVITY

Description

H-Val-Pro-Pro-OH, a milk-derived proline peptides derivative, is an inhibitor of Angiotensin I converting enzyme (ACE), with an IC_{50} of 9 μM.

IC_{50} & Target

IC50: 9 μM (ACE)[1].

In Vitro

H-Val-Pro-Pro-OH, a proline peptides derivative, could inhibit Angiotensin I converting enzyme (ACE), with an IC_{50} of 9 μM[1]. H-Val-Pro-Pro-OH could enhance insulin sensitivity and prevent insulin resistance in 3T3-F442A pre-adipocytes. H-Val-Pro-Pro-OH also has anti-hypertensive and anti-inflammatory functions. H-Val-Pro-Pro-OH further enhances the expression of glucose transporter 4 (GLUT4) in adipocytes and restores glucose uptake in TNF-treated adipocytes[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Nakamura Y, et al. Purification and characterization of angiotensin I-converting enzyme inhibitors from sour milk. J Dairy Sci. 1995 Apr;78(4):777-83.

[2]. Chakrabarti S, et al. Milk-Derived Tripeptides IPP (Ile-Pro-Pro) and VPP (Val-Pro-Pro) Enhance Insulin Sensitivity and Prevent Insulin Resistance in 3T3-F442A Preadipocytes. J Agric Food Chem. 2018 Oct 3;66(39):10179-10187.

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