H-Val-Pro-Pro-OH TFA

Cat. No.: HY-114161A

CAS No.: 2828433-08-3

Molecular Formula: $C_{17}H_{26}F_3N_3O_6$

Molecular Weight: 425.4

Target: Angiotensin Receptor

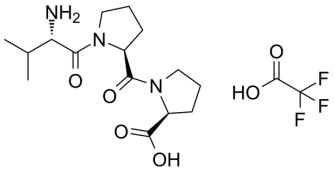
Pathway: GPCR/G Protein

Storage: Sealed storage, away from moisture

Powder -80°C 2 years

-20°C 1 year

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



SOLVENT & SOLUBILITY

In Vitro

H_2O : 125 mg/mL (293.84 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.3507 mL	11.7536 mL	23.5073 mL
	5 mM	0.4701 mL	2.3507 mL	4.7015 mL
	10 mM	0.2351 mL	1.1754 mL	2.3507 mL

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

In Vivo

1. Add each solvent one by one: PBS
   Solubility: 25 mg/mL (58.77 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

H-Val-Pro-Pro-OH (TFA), 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 (TFA), a proline peptides derivative, could inhibit Angiotensin I converting enzyme (ACE), with an IC_{50} of 9 μM[1]. H-Val-Pro-Pro-OH (TFA) could enhance insulin sensitivity and prevent insulin resistance in 3T3-F442A pre-adipocytes. H-Val-Pro-Pro-OH (TFA) also has anti-hypertensive and anti-inflammatory functions. H-Val-Pro-Pro-OH (TFA) 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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