H-Tyr-Phe-OH

Cat. No.: HY-W011258

CAS No.: 17355-11-2

Molecular Formula: $C_{18}H_{20}N_2O_4$

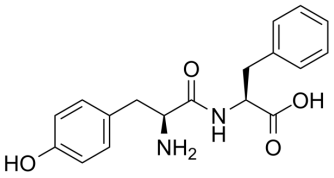
Molecular Weight: 328.36

Target: Xanthine Oxidase; Angiotensin-converting Enzyme (ACE)

Pathway: Metabolic Enzyme/Protease

Storage: -20°C, protect from light

* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 5 mg/mL (15.23 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.0454 mL	15.2272 mL	30.4544 mL
	5 mM	0.6091 mL	3.0454 mL	6.0909 mL
	10 mM	0.3045 mL	1.5227 mL	3.0454 mL

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

BIOLOGICAL ACTIVITY

Description

H-Tyr-Phe-OH (L-Tyrosyl-L-phenylalanine) is an orally active inhibitor of Angiotensin converting enzyme (ACE), with an inhibiton rate of 48% at 50 μM. H-Tyr-Phe-OH can be used as an biomarker for differentiating benign thyroid nodules (BTN) from thyroid cancer (TC). H-Tyr-Phe-OH exhibits xanthine oxidase inhibition (uric acid lowering) activity and serves as regulator in IL-8 production in neutrophil-like cells[1][2][3][4].

IC_{50} & Target

Target: ACE (Angiotensin converting enzyme), xanthine oxidase[1]

REFERENCES

[1]. Zhu Wei, et al. Biomarker containing keratin type II cytoskeleton 1b for differentiating benign thyroid nodules and thyroid cancer: China, CN114264828A[P]. 2022-04-01.

[2]. Enari Hiroyuki, et al. Angiotensin converting enzyme (ACE)-inhibiting peptides, ACE inhibitors containing the peptides, their uses, and manufacture of the peptides from shark cartilage: Japan, JP2005154326A[P]. 2005-06-16.

[3]. Mao Xiangchao, et al. Method for preparing cod fish peptide with xanthine oxidase inhibitory activity: China, CN113005166A[P]. 2021-06-22.

[4]. Hsueh PC, et al. Metabolomic profiling of parapneumonic effusion reveals a regulatory role of dipeptides in interleukin-8 production in neutrophil-like cells. Anal Chim Acta. 2020 Sep 1;1128:238-250.

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