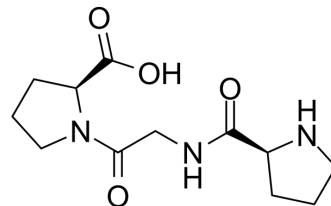


H-Pro-Gly-Pro-OH

Cat. No.:	HY-P4486
CAS No.:	7561-51-5
Molecular Formula:	C ₁₂ H ₁₉ N ₃ O ₄
Molecular Weight:	269.3
Sequence:	H-Pro-Gly-Pro-OH
Sequence Shortening:	PGP
Target:	Others
Pathway:	Others
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

H₂O : 125 mg/mL (464.17 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	3.7133 mL	18.5667 mL	37.1333 mL
5 mM	0.7427 mL	3.7133 mL	7.4267 mL
10 mM	0.3713 mL	1.8567 mL	3.7133 mL

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

BIOLOGICAL ACTIVITY

Description

H-Pro-Gly-Pro-OH is a collagen-derived matrikine that has classically been described as a neutrophil chemoattractant. H-Pro-Gly-Pro-OH is perfectly positioned to focus neutrophils on the site required and direct a localized repair response. H-Pro-Gly-Pro-OH activates the transcription of neurotrophins and their receptor genes after cerebral ischemia^{[1][2]}.

In Vivo

H-Pro-Gly-Pro-OH (37.5 µg/kg; i.p.) activates the transcription of neurotrophins and their receptor genes after cerebral ischemia in rats^[2].

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

Animal Model:	270-320 g, male Wistar rats (focal cerebral ischemia) ^[2]
Dosage:	37.5 µg/kg

Administration:	I.p.; 15, 1 h, 4, 8, 24, 28, 32, 48, 52, and 56 h
Result:	Enhanced the transcription of Bdnf and TrkC 3 h after pMCAO and Ngf, TrkB, TrkC, and TrkA 24 h after pMCAO.

REFERENCES

- [1]. Patel DF, et al. The multifaceted roles of the matrikine Pro-Gly-Pro in pulmonary health and disease. *Eur Respir Rev.* 2018 Jun 27;27(148):180017.
- [2]. Dmitrieva VG, et al. Semax and Pro-Gly-Pro activate the transcription of neurotrophins and their receptor genes after cerebral ischemia. *Cell Mol Neurobiol.* 2010 Jan;30(1):71-9.

Caution: Product has not been fully validated for medical applications. For research use only.

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