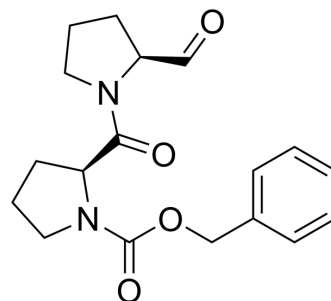


Z-Pro-prolinal

Cat. No.:	HY-134454A
CAS No.:	88795-32-8
Molecular Formula:	C ₁₈ H ₂₂ N ₂ O ₄
Molecular Weight:	330.38
Target:	Prolyl Endopeptidase (PREP)
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Z-Pro-prolinal (N-Benzyloxycarbonyl-L-prolyl-L-prolinal) is a specific, orally active prolyl endopeptidase (PREP) inhibitor with an IC ₅₀ of 0.4 nM for porcine PREP ^{[1][2][3]} .
IC₅₀ & Target	IC ₅₀ : 0.4 nM (porcine PREP) ^[2] K _i : 3.7 nM (PREP from bovine brain) ^[1]
In Vivo	Z-Pro-prolinal (N-Benzyloxycarbonyl-L-prolyl-L-prolinal) (100 mg/kg; p.o.; once) increases septal vasopressin content in rats [3]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
Animal Model:	Male Wistar rats ^[3]
Dosage:	100 mg/kg
Administration:	Oral administration, once
Result:	Significantly increased the septal arginine-vasopressin (AVP) content.

REFERENCES

- [1]. Tsuru D, et al. Thiazolidine derivatives as potent inhibitors specific for prolyl endopeptidase. *J Biochem.* 1988;104(4):580-586.
- [2]. Kilpeläinen TP, et al. The effect of prolyl oligopeptidase inhibitors on alpha-synuclein aggregation and autophagy cannot be predicted by their inhibitory efficacy. *Biomed Pharmacother.* 2020;128:110253.
- [3]. Miura N, et al. Increase in the septal vasopressin content by prolyl endopeptidase inhibitors in rats. *Neurosci Lett.* 1995;196(1-2):128-130.

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

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