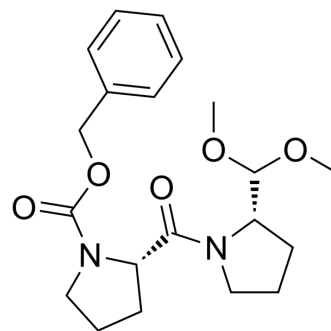


## Z-Pro-Pro-aldehyde-dimethyl acetal

<b>Cat. No.:</b>	HY-P4308
<b>CAS No.:</b>	170116-63-9
<b>Molecular Formula:</b>	C <sub>20</sub> H <sub>28</sub> N <sub>2</sub> O <sub>5</sub>
<b>Molecular Weight:</b>	376.45
<b>Sequence:</b>	Pro-{Pro-Aldehyde-dimethyl acetal}
<b>Sequence Shortening:</b>	P-{Pro-Aldehyde-dimethyl acetal}
<b>Target:</b>	Prolyl Endopeptidase (PREP)
<b>Pathway:</b>	Metabolic Enzyme/Protease
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Z-Pro-Pro-aldehyde-dimethyl acetal is a potent inhibitor of prolyl endopeptidase (PREP), a cytoplasmic serine endoprotease (IC <sub>50</sub> = 12 nM). Z-Pro-Pro-aldehyde-dimethyl acetal plays an important role in cognitive dysfunction in aging and neurodegenerative diseases including Alzheimer's disease <sup>[1][2]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	PREP 12 nM (IC <sub>50</sub> )

### REFERENCES

[1]. Robin S B Williams, et al. A common mechanism of action for three mood-stabilizing drugs. *Nature*. 2002 May 16;417(6886):292-5.

[2]. Andis Klegeris, et al. Prolyl endopeptidase is revealed following SILAC analysis to be a novel mediator of human microglial and THP-1 cell neurotoxicity. *Glia*. 2008 Apr 15;56(6):675-85.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA