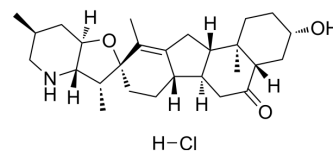


## Peimisine hydrochloride

<b>Cat. No.:</b>	HY-N0214A
<b>CAS No.:</b>	900498-44-4
<b>Molecular Formula:</b>	C <sub>27</sub> H <sub>42</sub> ClNO <sub>3</sub>
<b>Molecular Weight:</b>	464.08
<b>Target:</b>	mAChR; Angiotensin-converting Enzyme (ACE); Apoptosis
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling; Metabolic Enzyme/Protease; Apoptosis
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Peimisine (Ebeiensine) hydrochloride is a muscarinic M receptor antagonist and angiotensin converting enzyme (ACE) inhibitor. Peimisine hydrochloride shows anti-tumor, anti-inflammatory, antihypertensive activities. Peimisine can induce apoptosis and be used in cough and asthma research <sup>[1][2][3]</sup> .																
<b>In Vitro</b>	<p>Peimisine (17.43-92.07 µg/mL; 72 h) shows significant cytotoxic effects<sup>[3]</sup>.</p> <p>Peimisine (15 µg/mL; 24, 48 and 72 h) induces G<sub>0</sub>/G<sub>1</sub> phase arrest and rising apoptosis rate<sup>[3]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Apoptosis Analysis<sup>[2]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>A2780 cells</td> </tr> <tr> <td>Concentration:</td> <td>15 µg/mL</td> </tr> <tr> <td>Incubation Time:</td> <td>24, 48 and 72 hours</td> </tr> <tr> <td>Result:</td> <td>Induced G<sub>0</sub>/G<sub>1</sub> phase arrest of A2780 cells in a time-dependent manner.</td> </tr> </table> <p>Cell Cytotoxicity Assay<sup>[2]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>LLC, A2780, HepG2 and A549 cells</td> </tr> <tr> <td>Concentration:</td> <td>17.43-92.07 µg/mL</td> </tr> <tr> <td>Incubation Time:</td> <td>72 hours</td> </tr> <tr> <td>Result:</td> <td>Inhibited LLC, A2780, HepG2 and A549 cells with the IC<sub>50</sub> values of 20.75 µg/mL, 17.43 µg/mL, 92.07 µg/mL, 36.11 µg/mL, respectively.</td> </tr> </table>	Cell Line:	A2780 cells	Concentration:	15 µg/mL	Incubation Time:	24, 48 and 72 hours	Result:	Induced G <sub>0</sub> /G <sub>1</sub> phase arrest of A2780 cells in a time-dependent manner.	Cell Line:	LLC, A2780, HepG2 and A549 cells	Concentration:	17.43-92.07 µg/mL	Incubation Time:	72 hours	Result:	Inhibited LLC, A2780, HepG2 and A549 cells with the IC <sub>50</sub> values of 20.75 µg/mL, 17.43 µg/mL, 92.07 µg/mL, 36.11 µg/mL, respectively.
Cell Line:	A2780 cells																
Concentration:	15 µg/mL																
Incubation Time:	24, 48 and 72 hours																
Result:	Induced G <sub>0</sub> /G <sub>1</sub> phase arrest of A2780 cells in a time-dependent manner.																
Cell Line:	LLC, A2780, HepG2 and A549 cells																
Concentration:	17.43-92.07 µg/mL																
Incubation Time:	72 hours																
Result:	Inhibited LLC, A2780, HepG2 and A549 cells with the IC <sub>50</sub> values of 20.75 µg/mL, 17.43 µg/mL, 92.07 µg/mL, 36.11 µg/mL, respectively.																

### CUSTOMER VALIDATION

- Phytomedicine. 2023 Jul 2, 154946.
- J Pharm Pharmacol. 2023 Nov 25:rgad091.

---

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

---

[1]. Pan F, et al. Peimisine and peiminine production by endophytic fungus *Fusarium* sp. isolated from *Fritillaria unibracteata* var. *wabensis*. *Phytomedicine*. 2014 Jul-Aug;21(8-9):1104-9.

[2]. Armando Alberola-Die, et al. Peimine, an Anti-Inflammatory Compound from Chinese Herbal Extracts, Modulates Muscle-Type Nicotinic Receptors. *Int J Mol Sci*. 2021 Oct 19;22(20):11287.

[3]. Dongdong Wang, et al. Evaluation of antitumor property of extracts and steroidal alkaloids from the cultivated *Bulbus Fritillariae ussuriensis* and preliminary investigation of its mechanism of action. *BMC Complement Altern Med*. 2015 Feb 21;15:29.

---

**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](mailto:tech@MedChemExpress.com)

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