

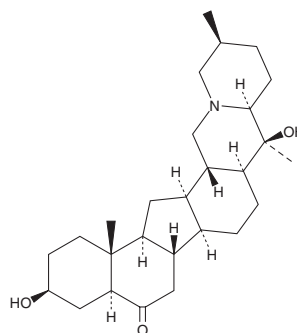
# PRODUCT INFORMATION



## Peiminine

Item No. 29618

CAS Registry No.: 18059-10-4  
Formal Name: (5 $\alpha$ )-3 $\beta$ ,20-dihydroxy-cevan-6-one  
Synonym: Verticinone  
MF: C<sub>27</sub>H<sub>43</sub>NO<sub>3</sub>  
FW: 429.6  
Purity:  $\geq$ 98%  
Supplied as: A solid  
Storage: -20°C  
Stability:  $\geq$ 4 years  
Item Origin: Plant/*Fritillaria thun-bergli*



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Peiminine is supplied as a solid. A stock solution may be made by dissolving the peiminine in the solvent of choice, which should be purged with an inert gas. Peiminine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of peiminine in ethanol and DMF is approximately 10 mg/ml and approximately 15 mg/ml in DMSO.

Peiminine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, peiminine should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Peiminine has a solubility of approximately 0.03 mg/ml in a 1:30 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Peiminine is an alkaloid that has been found in *Fritillaria* and has diverse biological activities.<sup>1-3</sup> It increases protein levels of the autophagy marker LC3B-II and induces cell death in HCT116 colorectal carcinoma cells in a concentration-dependent manner.<sup>1</sup> Peiminine (3 mg/kg every other day) reduces tumor growth in an HCT116 mouse xenograft model. It has antitussive effects in a mouse cough model induced by ammonia liquor when administered at a dose of 3 mg/kg.<sup>2</sup> Peiminine (5 mg/kg) reduces dermal and epidermal thickness, inhibits dermal infiltration of eosinophils and mast cells, and decreases serum levels of IgE, IL-4, and TNF- $\alpha$  in a mouse model of atopic dermatitis induced by dinitrochlorobenzene (DNCB).<sup>3</sup>

### References

1. Lyu, Q., Tou, F., Su, H., *et al.* The natural product peiminine represses colorectal carcinoma tumor growth by inducing autophagic cell death. *Biochem. Biophys. Res. Commun.* **462**(1), 38-45 (2015).
2. Wang, D., Zhu, J., Wang, S., *et al.* Antitussive, expectorant and anti-inflammatory alkaloids from *Bulbus Fritillariae Cirrhosae*. *Fitoterapia* **82**(8), 1290-1294 (2011).
3. Lim, J.-M., Lee, B., Min, J.-H., *et al.* Effect of peiminine on DNCB-induced atopic dermatitis by inhibiting inflammatory cytokine expression *in vivo* and *in vitro*. *Int. Immunopharmacol.* **56**, 135-142 (2018).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/08/2022

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897  
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM