

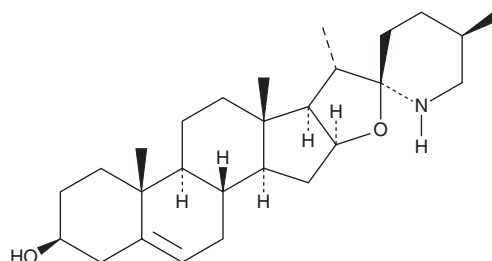
# PRODUCT INFORMATION



## Solasodine

Item No. 28112

**CAS Registry No.:** 126-17-0  
**Formal Name:** (3 $\beta$ ,22 $\alpha$ ,25R)-spirosol-5-en-3-ol  
**Synonyms:** NSC 178260, NSC 179187, Purapuridine, Solancarpidine, Solasod-5-en-3 $\beta$ -ol, (-)-Solasodine  
**MF:** C<sub>27</sub>H<sub>43</sub>NO<sub>2</sub>  
**FW:** 413.6  
**Purity:**  $\geq$ 98%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 4 years  
**Item Origin:** Plant/*Solanum aviculare*



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

### Laboratory Procedures

Solasodine is supplied as a crystalline solid. A stock solution may be made by dissolving the solasodine in the solvent of choice, which should be purged with an inert gas. Solasodine is soluble in organic solvents such as ethanol and dimethyl formamide. The solubility of solasodine in these solvents is approximately 1 mg/ml.

### Description

Solasodine is an alkaloid that has been found in *Solanum* and has diverse biological activities.<sup>1-3</sup> It reduces glutamate-induced excitotoxicity in PC12 cells when used at a concentration of 40  $\mu$ M.<sup>1</sup> Solasodine (40  $\mu$ M) inhibits cell invasion and migration of, as well as reverses TGF- $\beta$ 1-induced epithelial-to-mesenchymal transition (EMT) in, HCT116 cells.<sup>2</sup> Solasodine (30 and 50 mg/kg) reduces tumor growth and inhibits EMT in an HCT116 mouse xenograft model. It also reduces paw edema induced by carrageenan or arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607) in rats when administered at a dose of 75 mg/kg.<sup>3</sup>

### References

1. Garca-Pupo, L., Zaldo-Castro, A., Exarchou, V., *et al.* In vitro neuroprotective and anti-inflammatory activities of natural and semi-synthetic spirosteroid analogues. *Molecules* **21**(8), 992 (2016).
2. Zhuang, Y., Wu, C., Zhou, J., *et al.* Solasodine reverses stemness and epithelial-mesenchymal transition in human colorectal cancer. *Biochem. Biophys. Res. Commun.* **505**(2), 485-491 (2018).
3. Pandurangan, A., Khosa, R.L., and Hemalatha, S. Anti-inflammatory activity of an alkaloid from *Solanum trilobatum* on acute and chronic inflammation models. *Nat. Prod. Res.* **25**(12), 1132-1141 (2011).

#### 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.

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