

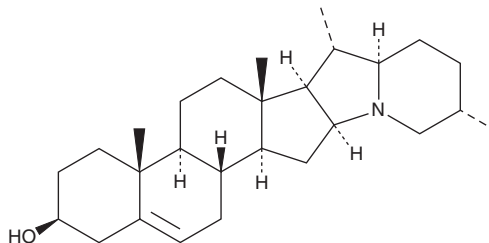
# PRODUCT INFORMATION



## Solanidine

Item No. 36433

CAS Registry No.: 80-78-4  
Formal Name: (3 $\beta$ )-solanid-5-en-3-ol  
Synonyms: (-)-Solanidine, 22R,25S-Solanidine, NSC 76025  
MF: C<sub>27</sub>H<sub>43</sub>NO  
FW: 397.6  
Purity:  $\geq 98\%$   
Supplied as: A solid  
Storage: -20°C  
Stability:  $\geq 4$  years  
Item Origin: Plant/*Solanum tuberosum* L.



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

### Laboratory Procedures

Solanidine is supplied as a solid. A stock solution may be made by dissolving the solanidine in the solvent of choice, which should be purged with an inert gas. Solanidine is soluble in ethanol, DMSO, and methanol.

### Description

Solanidine is a steroidal glycoalkaloid metabolite that has been found in potato (*S. tuberosum*) and has anticancer and teratogenic activities.<sup>1-3</sup> It inhibits the growth of HT-29 colon and HepG2 liver cancer cells by 80.9 and 82.2%, respectively, when used at a concentration of 100  $\mu\text{g/ml}$ .<sup>2</sup> Solanidine (176 mg/kg) is teratogenic to hamster embryos when administered to pregnant dams on day eight of gestation.<sup>3</sup>

### References

1. Nikolic, N.C. and Stankovic, M.Z. Solanidine hydrolytic extraction and separation from the potato (*Solanum tuberosum* L.) vines by using solid-liquid-liquid systems. *J. Agric. Food Chem.* **51**(7), 1845-1849 (2003).
2. Lee, K.-R., Kozukue, N., Han, J.-S., *et al.* Glycoalkaloids and metabolites inhibit the growth of human colon (HT29) and liver (HepG2) cancer cells. *J. Agric. Food Chem.* **52**(10), 2832-2839 (2004).
3. Gaffield, W. and Keeler, R.F. Implication of C-5, C-6 unsaturation as a key structural factor in steroidal alkaloid-induced mammalian teratogenesis. *Experientia* **49**(10), 922-924 (1993).

#### 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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