PRODUCT INFORMATION



Solasonine

Item No. 28111

CAS Registry No.: 19121-58-5

Formal Name: (3β,22α,25R)-spirosol-5-en-3-yl

> O-6-deoxy-α-L-mannopyranosyl- $(1\rightarrow 2)$ -O-[β-D-glucopyranosyl- $(1\rightarrow 3)$]- β -D-galactopyranoside

Synonyms: α-Solasonine, NSC 82149

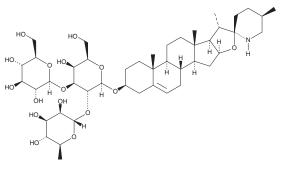
MF: C₄₅H₇₃NO₁₆ FW: 884.1 **Purity:** ≥98%

Supplied as: A crystalline solid

Storage: -20°C Stability: ≥4 years

Item Origin: Plant/Solanum nigrum

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



Laboratory Procedures

Solasonine is supplied as a crystalline solid. A stock solution may be made by dissolving the solasonine in the solvent of choice, which should be purged with an inert gas. Solasonine is soluble in the organic solvent DMSO at a concentration of approximately 100 mg/ml.

Description

Solasonine is a steroidal glycoalkaloid that has been found in S. melongena and has diverse biological activities, including anticancer, antiviral, and antiparasitic properties. 1-3 It inhibits the growth of HT-29 and HepG2 cells by 68.4 and 79.3%, respectively, when used at a concentration of 10 µg/ml. Solasonine inhibits expression of hepatitis B virus surface antigen (HBsAg) in HepG2 2.2.15 cells (IC₅₀ = $5.9 \mu M$).² It decreases survival of blood stream forms and epimastigotes of two T. cruzi strains in a concentration-dependent manner.³

References

- 1. 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).
- Chou, S.-C., Huang, T.-S., Lin, E.-H., et al. Antihepatitis B virus constituents of Solanum erianthum. Nat. Prod. Commun. 7(2), 153-156 (2012).
- 3. Hall, C.A., Hobby, T., and Cipollini, M. Efficacy and mechanisms of α-solasonine-and α-solamargineinduced cytolysis on two strains of Trypanosoma cruzi. J. Chem. Ecol. 32(11), 2405-2416 (2006).

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

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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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