

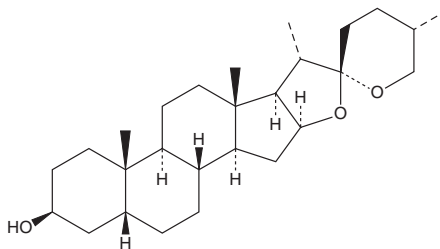
PRODUCT INFORMATION



Sarsasapogenin

Item No. 24973

CAS Registry No.: 126-19-2
Formal Name: (3 β ,5 β ,25S)-spirostan-3-ol
Synonym: NSC 1615
MF: C₂₇H₄₄O₃
FW: 416.6
Purity: \geq 95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years



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

Laboratory Procedures

Sarsasapogenin is supplied as a crystalline solid. A stock solution may be made by dissolving the sarsasapogenin in the solvent of choice. Sarsasapogenin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of sarsasapogenin in ethanol and DMF is approximately 2 mg/ml and approximately 0.2 mg/ml in DMSO.

Sarsasapogenin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, sarsasapogenin should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Sarsasapogenin has a solubility of approximately 0.3 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Sarsasapogenin is a steroid sapogenin originally isolated from *Smilax* that has antiproliferative, pro-apoptotic, anti-inflammatory, neuroprotective, and antidepressant-like properties.¹⁻⁶ Sarsasapogenin inhibits proliferation of HeLa cervical, MCF-7 breast, HepG2 liver, A549 lung, A375.S2 melanoma, and HT-1080 fibrosarcoma cells (IC₅₀s = 31.36-48.79 μ M) and dose-dependently induces apoptosis of HeLa cells.^{2,3} It also protects human SH-SY5Y neuroblastoma cells from hydrogen peroxide-induced death with a neuroprotective ratio of 27.3% when used at a concentration of 100 μ M.⁵ *In vivo*, sarsasapogenin (10 mg/kg) reduces 2,3,4-trinitrobenzene sulfonic acid-induced colon shortening, myeloperoxidase activity, NF- κ B activation, and IL-1 β , TNF- α , and IL-6 levels in mice.⁴ It also increases the percentage of correct responses in the Y-maze test in aged rats when administered at a dose of 3.6 mg/kg per day.⁷ Sarsasapogenin (12.5 mg/kg per day) reduces the amount of time mice spend immobile in the forced swim test, indicating antidepressant-like behavior.⁶

References

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3. Shen, S., Zhang, Y., Zhang, R., et al. *Biochem. Biophys. Res. Commun.* **441(2)**, 519-524 (2013).
4. Lim, S.M., Jeong, J.J., Kang, G.D., et al. *Int. Immunopharmacol.* **25(2)**, 493-503 (2015).
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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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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