

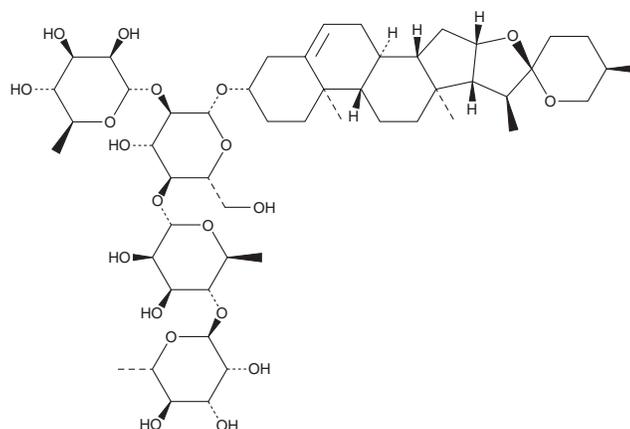
PRODUCT INFORMATION



Formosanin C

Item No. 40236

CAS Registry No.: 50773-42-7
Formal Name: (3 β ,25R)-spirost-5-en-3-yl O-6-deoxy- α -L-mannopyranosyl-(1 \rightarrow 2)-O-[O-6-deoxy- α -L-mannopyranosyl-(1 \rightarrow 4)]-6-deoxy- α -L-mannopyranosyl-(1 \rightarrow 4)]- β -D-glucopyranoside
Synonyms: NSC 306864, Paris Saponin II, Polyphyllin B, PS II
MF: C₅₁H₈₂O₂₀
FW: 1,015.2
Purity: \geq 98%
Supplied as: A solid
Storage: -20°C
Stability: \geq 4 years
Item Origin: Plant/*Rhizoma paridis*



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

Laboratory Procedures

Formosanin C is supplied as a solid. A stock solution may be made by dissolving the formosanin C in the solvent of choice, which should be purged with an inert gas. Formosanin C is soluble in DMSO. Formosanin C is slightly soluble in chloroform and methanol. It is also slightly soluble in water. We do not recommend storing the aqueous solution for more than one day.

Description

Formosanin C is a diosgenin saponin that has been found in *P. formosana* and has diverse biological activities.¹⁻⁴ It is active against *C. albicans* (MIC = 1 μ g/ml) and inhibits *C. albicans* biofilm formation (MIC = 25 μ g/ml).¹ Formosanin C (0.625-5 μ M) inhibits LPS-induced production of prostaglandin E₂ (PGE₂; Item No. 14010) and nitric oxide (NO) in RAW 264.7 macrophages.² It induces lipid peroxidation and ferroptosis in MDA-MB-231 breast cancer cells when used at a concentration of 5 μ M.³ *In vivo*, formosanin C (1.5 mg/kg) delays disease onset in a guinea pig model of S-antigen-induced experimental autoimmune uveitis (EAU).⁴

References

1. Dorsaz, S., Snäkä, T., Favre-Godal, Q., *et al.* Identification and mode of action of a plant natural product targeting human fungal pathogens. *Antimicrob. Agents Chemother.* **61(9)**, e00829-17 (2017).
2. Yin, L., Shi, C., Zhang, Z., *et al.* Formosanin C attenuates lipopolysaccharide-induced inflammation through nuclear factor- κ B inhibition in macrophages. *Korean J. Physiol. Pharmacol.* **25(5)**, 395-401 (2021).
3. Chen, H.-C., Tang, H.-H., Hsu, W.-H., *et al.* Vulnerability of triple-negative breast cancer to saponin formosanin C-induced ferroptosis. *Antioxidants (Basel)* **11(2)**, 298 (2022).
4. Wu, R.-T., Lin, W.-J., Chiang, H.-C., *et al.* Modulation of experimental autoimmune uveitis with formosanin-C in guinea pigs. *J. Ocul. Pharmacol.* **6(4)**, 301-311 (1990).

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, 02/08/2024

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