

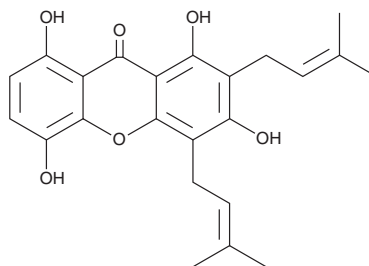
PRODUCT INFORMATION



Gartanin

Item No. 35631

CAS Registry No.: 33390-42-0
Formal Name: 1,3,5,8-tetrahydroxy-2,4-bis(3-methyl-2-buten-1-yl)-9H-xanthen-9-one
Synonym: NSC 692946
MF: C₂₃H₂₄O₆
FW: 396.4
Purity: ≥98%
UV/Vis.: λ_{max}: 224, 259, 284, 351 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Garcinia mangostana* stem barks



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

Laboratory Procedures

Gartanin is supplied as a solid. A stock solution may be made by dissolving the gartanin in the solvent of choice, which should be purged with an inert gas. Gartanin is soluble in chloroform.

Description

Gartanin is a prenylated xanthone that has been found in *G. mangostana* and has anticancer activity.^{1,2} It inhibits the growth of T24, UM-UC-3, HT-1376, and TCCSUP bladder cancer cells (IC₅₀s = 4.1-18.1 μM).¹ Gartanin (10 and 50 μM) increases the number of LC3 puncta, a marker of autophagy, in T24 cells expressing pEGFP-LC3, as well as induces apoptosis in T24 and RT4 cells. It binds to NEDD8-activating enzyme (NAE) and inhibits NEDDylation of cullin 1 and ubiquitin-conjugating enzyme 12 (UBC12) in PC3 and 22Rv1 prostate cancer cells.²

References

1. Liu, Z., Antalek, M., Nguyen, L., *et al.* The effect of gartanin, a naturally occurring xanthone in mangosteen juice, on the mTOR pathway, autophagy, apoptosis, and the growth of human urinary bladder cancer cell lines. *Nutr. Cancer* **65 Suppl. 1 (0 1)**, 68-77 (2013).
2. Pham, V., Rendon, R., Le, V.X., *et al.* Gartanin is a novel NEDDylation inhibitor for induction of Skp2 degradation, FBXW2 expression, and autophagy. *Mol. Carcinog.* **59(2)**, 193-201 (2020).

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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