

# PRODUCT INFORMATION

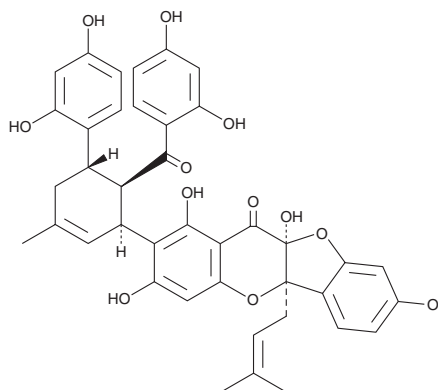


## Sanggenone C

Item No. 30061

**CAS Registry No.:** 80651-76-9  
**Formal Name:** (5aR,10aS)-2-[(1S,5S,6R)-6-(2,4-dihydroxybenzoyl)-5-(2,4-dihydroxyphenyl)-3-methyl-2-cyclohexen-1-yl]-5a,10a-dihydro-1,3,8,10a-tetrahydro-5a-(3-methyl-2-buten-1-yl)-11H-benzofuro[3,2-b][1]benzopyran-11-one

**MF:** C<sub>40</sub>H<sub>36</sub>O<sub>12</sub>  
**FW:** 708.7  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 285, 311 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years  
**Item Origin:** Plant/Cortex Mori Radicis



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

### Laboratory Procedures

Sanggenone C is supplied as a crystalline solid. A stock solution may be made by dissolving the sanggenone C in the solvent of choice, which should be purged with an inert gas. Sanggenone C is soluble in the organic solvent DMSO.

### Description

Sanggenone C is a flavonoid that has been found in mulberry bark and has diverse biological activities.<sup>1-4</sup> It inhibits TNF-α- or IL-1β-induced polymorphonuclear leukocyte (PMN) adhesion to human synovial cells (HSCs; IC<sub>50</sub>s = 27.29 and 54.43 nM, respectively), as well as inhibits NF-κB activation in HSCs.<sup>1</sup> Sanggenone C induces apoptosis and production of reactive oxygen species (ROS) in HT-29 cells when used at concentrations ranging from 10 to 40 μM.<sup>2</sup> It decreases cell viability of HT-29 cells *in vitro* and reduces tumor growth in an HT-29 mouse xenograft model when administered at a dose of 10 mg/kg. Sanggenone C increases vertebrate column bone mineralization in a zebrafish model of prednisone-induced osteoporosis.<sup>3</sup> It also attenuates cardiac hypertrophy and fibrosis and reduces activation of nuclear factor of activated T cells 2 (NFAT2) in a mouse model of pressure overload-induced cardiac hypertrophy.<sup>4</sup>

### References

1. Li, L.-C., Shen, F., Hou, Q., *et al.* Inhibitory effect and mechanism of action of sanggenon C on human polymorphonuclear leukocyte adhesion to human synovial cells. *Acta Pharmacol. Sin.* **23(2)**, 138-142 (2002).
2. Chen, L.-D., Liu, Z.-H., Zhang, L.-F., *et al.* Sanggenon C induces apoptosis of colon cancer cells via inhibition of NO production, iNOS expression and ROS activation of the mitochondrial pathway. *Oncol. Rep.* **38(4)**, 2123-2131 (2017).
3. Wang, H., Feng, T., Guo, D., *et al.* Sanggenon C stimulates osteoblastic proliferation and differentiation, inhibits osteoclastic resorption, and ameliorates prednisone-induced osteoporosis in zebrafish model. *Molecules* **23(9)**, E2343 (2018).
4. Xiao, L., Gu, Y., Gao, L., *et al.* Sanggenon C protects against pressure overload induced cardiac hypertrophy via the calcineurin/NFAT2 pathway. *Mol. Med. Rep.* **16(4)**, 5338-5346 (2017).

#### 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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