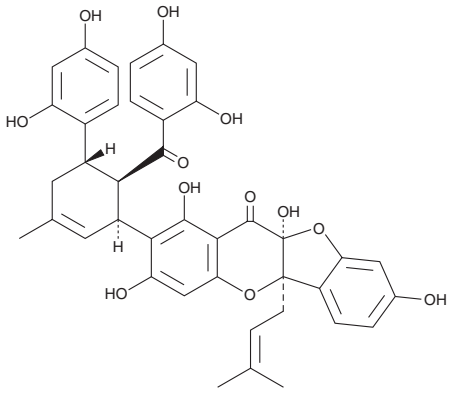
PRODUCT INFORMATION

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-tetrahydroxy-5a-(3-methyl-2-buten-1-yl)-11H-benzofuro[3,2-b][1]benzopyran-11-one
MF:	$C_{40}H_{36}O_{12}$
FW:	708.7
Purity:	≥98%
UV/Vis.:	λ_{max}: 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.[1-4] It inhibits TNF-α- or IL-1β-induced polymorphonuclear leukocyte (PMN) adhesion to human synovial cells (HSCs; IC_{50}s = 27.29 and 54.43 nM, respectively), as well as inhibits NF-κB activation in HSCs.[1] 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.[2] 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.[3] 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.[4]

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).

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