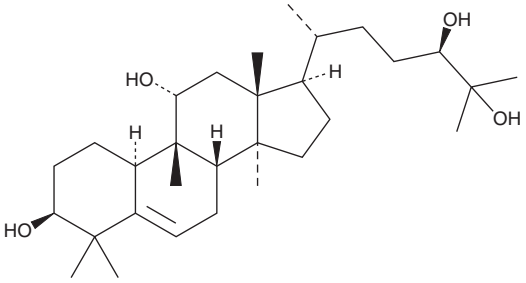
PRODUCT INFORMATION

Mogrol

Item No. 39253

CAS Registry No.:	88930-15-8
Formal Name:	(10α)-9β-methyl-19-norlanost-5-ene-3β,11α,24R,25-tetrol
MF:	$C_{30}H_{52}O_4$
FW:	476.7
Purity:	≥98%
Supplied as:	A solid
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Plant/*Momordica grosvenori*



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

Laboratory Procedures

Mogrol is supplied as a solid. A stock solution may be made by dissolving the mogrol in the solvent of choice, which should be purged with an inert gas. Mogrol is soluble in organic solvents such as methanol and DMSO.

Description

Mogrol is an aglycone form of various mogrosides that has been found in *S. grosvenorii* and has diverse biological activities.[1-3] It inhibits the proliferation and migration of A549, H1299, H1975, and SK-MES-1 lung cancer cells when used at concentrations ranging from 10 to 50 µM.[1] Mogrol (50 µM) induces AMPK activation and autophagy, as well as apoptosis and cell cycle arrest at the G_1 phase in A549 cells. *In vivo*, mogrol (10 mg/kg) reduces tumor weight and volume in an A549 mouse xenograft model. Mogrol (5 mg/kg) reduces colonic inflammatory cell infiltration and colonic shortening in a mouse model of ulcerative colitis induced by dextran sodium sulfate (DSS; Item No. 23250).[2] It also improves LPS-induced memory impairments and decreases hippocampal and frontal cortex levels of TNF-α, IL-1β, and IL-6 in LPS-challenged mice.[3]

References

1. Li, H., Liu, L., Chen, H.-Y., *et al.* Mogrol suppresses lung cancer cell growth by activating AMPK-dependent autophagic death and inducing p53-dependent cell cycle arrest and apoptosis. *Toxicol. Appl. Pharmacol.* **444**, 116037 (2022).
2. Liang, H., Cheng, R., Wang, J., *et al.* Mogrol, an aglycone of mogrosides, attenuates ulcerative colitis by promoting AMPK activation. *Phytomedicine* **81**, 153427 (2021).
3. Wang, H., Meng, G.-L., Zhang, C.-T., *et al.* Mogrol attenuates lipopolysaccharide (LPS)-induced memory impairment and neuroinflammatory responses in mice. *J. Asian Nat. Prod. Res.* **22(9)**, 864-878 (2020).

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