

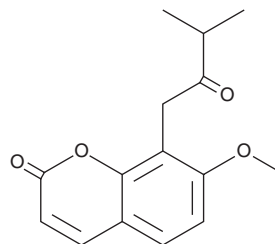
PRODUCT INFORMATION



Isomeranzin

Item No. 35827

CAS Registry No.: 1088-17-1
Formal Name: 7-methoxy-8-(3-methyl-2-oxobutyl)-2H-1-benzopyran-2-one
Synonym: 7-methoxy-8-(3-methyl-2-oxobutyl) Coumarin
MF: $C_{15}H_{16}O_4$
FW: 260.3
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 256 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years
Item Origin: Plant/Citrus maxima peel



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

Laboratory Procedures

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

Description

Isomeranzin is a coumarin that has been found in *C. grandis* and has antioxidant and anti-inflammatory activities.^{1,2} It inhibits superoxide anion generation in, and elastase release from, isolated human neutrophils stimulated with cytochalasin B (Item No. 11328) and fMLP (IC_{50} s = 3.89 and 4.33 μM , respectively).¹ Isomeranzin (30 μM) inhibits LPS-induced nitric oxide (NO) release in RAW 264.7 macrophages.² It improves survival in a mouse model of LPS-induced septic shock and decreases disease severity in a mouse model of colitis induced by dextran sulfate (DSS; Item No. 23250) when administered at a dose of 30 mg/kg.

References

1. Kuo, P.-C., Liao, Y.-R., Hung, H.-Y., *et al.* Anti-inflammatory and neuroprotective constituents from the peels of *Citrus grandis*. *Molecules* **22**(6), 967 (2017).
2. Xu, G., Feng, L., Song, P., *et al.* Isomeranzin suppresses inflammation by inhibiting M1 macrophage polarization through the NF- κ B and ERK pathway. *Int. Immunopharmacol.* **38**, 175-185 (2016).

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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