# **PRODUCT** INFORMATION



## Curdione

Item No. 30365

CAS Registry No.:	13657-68-6
Formal Name:	(3S,6E,10S)-6,10-dimethyl-3-(1-
	methylethyl)-6-cyclodecene-1,4-dione o
Synonym:	(+)-Curdione
MF:	C <sub>15</sub> H <sub>24</sub> O <sub>2</sub>
FW:	236.3
Purity:	≥98%
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years
Item Origin:	Plant/Curcuma zedoaria
Information represent	s the product specifications. Batch specific analytical results are provided on each certificate of analysis.

#### Laboratory Procedures

Curdione is supplied as a crystalline solid. A stock solution may be made by dissolving the curdione in the solvent of choice, which should be purged with an inert gas. Curdione is soluble in ethanol, DMSO, and dimethyl formamide. The solubility of curdione in these solvents is approximately 30 mg/ml.

#### Description

Curdione is a sesquiterpene that has been found in C. wenyujin and has diverse biological activities. It reduces the cytopathic effect of influenza A in MDCK cells (IC<sub>50</sub> = 28.32  $\mu$ M).<sup>1</sup> Curdione (100 μM) inhibits thrombin-induced aggregation, AMP-activated protein kinase (AMPK) and integrin αIIbβ3 phosphorylation, and increases in talin and vinculin levels in washed platelets.<sup>2</sup> It inhibits prostaglandin  $E_2$  (PGE<sub>2</sub>; Item No. 14010) production in LPS-stimulated RAW 264.7 macrophages (IC<sub>50</sub> = 1.12  $\mu$ M).<sup>3</sup>

#### References

- 1. Dong, J.-Y., Ma, X.-Y., Cai, X.-Q., et al. Sesquiterpenoids from Curcuma wenyujin with anti-influenza viral activities. Phytochemistry 85, 122-128 (2013).
- 2. Hui, F., Beibei, G., Yingli, Z., et al. Curdione inhibits thrombin-induced platelet aggregation via regulating the AMP-activated protein kinase-vinculin/talin-integrin αllbβ3 sign pathway. Phytomedicine 61, 152859 (2019).
- 3. Oh, O.-J., Min, H.-Y., and Lee, S.K. Inhibition of inducible prostaglandin E<sub>2</sub> production and cyclooxygenase-2 expression by curdione from Curcuma zedoaria Arch. Pharm. Res. 30(10), 1236-1239 (2007).

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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