

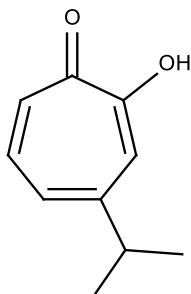
**Catalog # 10-2211**

**Hinokitiol**

CAS# 499-44-5

β-Thujaplicin, 2-Hydroxy-4-isopropyl-2,4,6-cycloheptatrien-1-one

Lot # X102165



Hinokitiol is a potent metal chelator that induces differentiation and apoptosis in teratocarcinoma F9 cells.<sup>1</sup> It acts as a reversible inhibitor of platelet-type 12-lipoxygenase ( $IC_{50} = 100 \text{ nM}$ ).<sup>2</sup> Reported to have strong antibacterial activity<sup>3</sup>, suppress cell growth and disrupt androgen receptor signaling<sup>4</sup> and activate hypoxia-inducible factor<sup>5</sup>.

- 1) Ido *et al.* (1999) *Induction of apoptosis by hinokitiol, a potent iron chelator, in teratocarcinoma F9 cells is mediated through the activation of caspase-3*, Cell Prolif. **32** 63
- 2) Suzuki *et al.* (2000) *Hinokitiol, a selective inhibitor of the platelet-type isozyme of arachidonate 12-lipoxygenase*, Biochem.Biophys.Res.Comm. **275** 885
- 3) Morita *et al.* (2007) *The mechanism of the bactericidal activity of hinokitiol*, Biocontrol Sci. **12** 101.
- 4) Liu and Yamauchi (2006) *Hinokitiol, a metal chelator derived from natural plants, suppresses cell growth and disrupts androgen receptor signaling in prostate carcinoma cell lines*, Biochem.Biophys.Res.Comm. **351** 26
- 5) Lee *et al.* (2010) *Hinokitiol activates the hypoxia-inducible factor (HIF) pathway through inhibition of HIF hydroxylases*, Biochem.Biophys.Res.Comm. **396** 370

**PHYSICAL DATA**

Molecular Weight:	164.20
Molecular Formula:	C <sub>10</sub> H <sub>12</sub> O <sub>2</sub>
Purity:	>98%
Solubility:	DMSO (up to 25 mg/ml) and ethanol (up to 25 mg/mL)
Physical Description:	White solid
Storage and Stability:	Store as supplied at room temperature for up to 1 year from the date of purchase. Store solutions at -20°C for up to 4 months.

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