

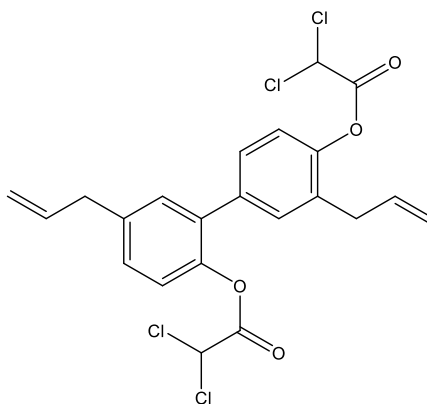
Catalog # 10-3596

Honokiol-DCA

CAS# 1620160-42-0

Honokiol bis-dichloroacetate; HDCA

Lot # S107027



Honokiol-DCA (HDCA), a synthetic bis-dichloroacetate ester of the natural product honokiol, is an allosteric inhibitor of the mitochondrial chaperone TRAP1.¹ It binds to an allosteric site on TRAP1 leading to inhibition ($IC_{50} \sim 8\mu M$) and is selective over HSP90, unlike 17-AAG and radicicol which are nonselective. Inhibition of TRAP1 leads to upregulation of succinate dehydrogenase and the mitochondrial deacetylase SIRT3. In neoplastic cells HDCA decreases proliferation, increases mitochondrial superoxide levels and abolishes tumorigenic growth.¹ HDCA demonstrated *in vivo* activity against vemurafenib-resistant (LM36R) melanoma.²

- 1) Sanchez-Martin *et al.* (2021), *Honokiol Bis-Dichloroacetate Is a Selective Allosteric Inhibitor of the Mitochondrial Chaperone TRAP1*; *Antioxid. Redox. Signal.*, **34** 505
- 2) Bonner *et al.* (2016), *Honokiol bis-dichloroacetate (Honokiol DCA) demonstrates activity in vemurafenib-resistant melanoma in vivo*; *Oncotarget*, **7** 12857

PHYSICAL DATA

Molecular Weight:	488.18
Molecular Formula:	C ₂₂ H ₁₈ Cl ₄ O ₄
Purity:	>98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (50 mg/ml)
Physical Description:	Viscous oil
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 1 month.

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