

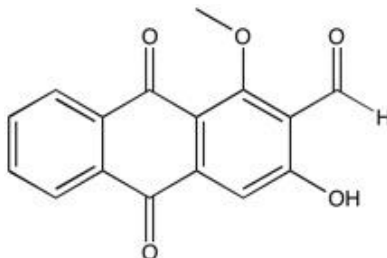
Catalog # 10-2516

Damnacanthal

CAS# 477-84-9

9,10-Dihydroxy-3-hydroxy-1-methoxy-9,10-dioxo-2-anthracenecarboxaldehyde

Lot # X102672



Potent inhibitor of p56^{lck} tyrosine kinase activity (IC₅₀ = 17 nM for inhibition of autophosphorylation). Displays 7- to 20-fold selectivity over p59^{lyn} and p60^{src} tyrosine kinases and > 40-fold to 100-fold selectivity over other kinases¹. Mobilizes intracellular Ca²⁺ in dermal fibroblasts². Inhibits LIM-kinase, impairing cell migration and invasion³. A potent inhibitor of angiogenesis⁴. Inhibits mast cell activation⁵.

- 1) Faltynek *et al.* (1995), *Damnacanthal is a highly potent, selective inhibitor of p56lck tyrosine kinase activity*; *Biochemistry*, **34** 12404
- 2) Aoki *et al.* (2000), *Mechanism of damnacanthal-induced ;Ca(2+)](i) elevation in human dermal fibroblasts*; *Eur. J. Pharmacol.*, **387** 119
- 3) Ohashi *et al.* (2014), *Damnacanthal, an effective inhibitor of LIM-kinase, inhibits cell migration and invasion*; *Mol. Biol. Cell*, **25** 828
- 4) Garcia-Vilas *et al.* (2017), *The noni anthraquinone damnacanthal is a multi-kinase inhibitor with potent anti-angiogenic effects*; *Cancer Letters*, **385** 1
- 5) Garcia-Vilas *et al.* (2015), *Damnacanthal inhibits IgE receptor-mediated activation of mast cells*; *Mol. Immunol.*, **65** 86

PHYSICAL DATA

Molecular Weight:	282.25
Molecular Formula:	C ₁₆ H ₁₀ O ₅
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 7 mg/ml)
Physical Description:	Yellow solid
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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