

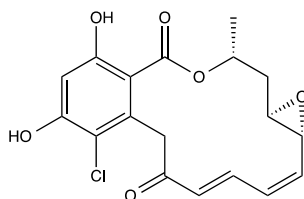
Catalog #10-2102

Radicol

CAS# 12772-57-5

(1aR,2Z,4E,14R,15aR)-8-Chloro-1a,14,15,15a-tetrahydro-9,11-dihydroxy-14-methyl-6H-oxireno[e][2]benzoxacyclotetradecin-6,12(7H)-dione; Monorden

Lot # X101018



Radicol inhibits heat shock protein 90 (Hsp90) activity by binding to the ATP-binding pocket.¹ In cells Hsp90 client proteins such as Raf kinase², HIF-1 α ³ and estrogen receptor⁴ are destabilized and proteolytically degraded. Inhibits expression of COX-2 without affecting COX-1 expression in LPS-stimulated macrophages (IC₅₀=27 nM).⁵ Inhibits angiogenesis.⁶

- 1) Schulte *et al.* (1999), *Interaction of radicol with members of the heat shock protein 90 family of molecular chaperones*; Mol.Endocrinol. **13** 1435
- 2) Soga *et al.* (1998), *Radicol leads to selective depletion of Raf kinase and disrupts K-Ras-activated aberrant signaling pathway*; J.Biol.Chem. **273** 822
- 3) Hur *et al.* (2002) *Reduction of hypoxia-induced transcription through the repression of hypoxia-inducible factor-1alpha/aryl hydrocarbon receptor nuclear translocator DNA binding by the 90-kDa heat-shock protein inhibitor radicol*; Mol.Pharmacol. **62** 975
- 4) Lee *et al.* (2002) *Radicol represses the transcriptional function of the estrogen receptor by suppressing the stabilization of the receptor by heat shock protein 90*; Mol.Cell.Endocrinol. **188** 47
- 5) Chanmugam *et al.* (1995) *Radicol, a protein tyrosine kinase inhibitor, suppresses the expression of mitogen-inducible cyclooxygenase in macrophages stimulated with lipopolysaccharide and in experimental glomerulonephritis*; J.Biol.Chem. **270** 5418
- 6) Oikawa *et al.* (1993) *Radicol, a microbial cell differentiation modulator, inhibits in vivo angiogenesis*; Eur.J.Pharmacol. **241** 221

PHYSICAL DATA

Molecular Weight:	364.78
Molecular Formula:	C ₁₈ H ₁₇ ClO ₆
Purity:	>99% (HPLC)
	NMR: (Conforms)
Solubility:	DMSO (20 mg/mL) and ethanol (8 mg/mL)
Physical Description:	White solid
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month.

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