# Radicicol

#### **HSP90** inhibitor

Antifungal macrocyclic lactone antibiotic with antimalarial activity. Potent inhibitor of HSP90. Binds more strongly to HSP90 (nanomolar affinity) than to Grp94. Also binds to yeast HSP90, E. coli HtpG and TRAP-1. Noncompetitive inhibitor of ATP citrate lyase. Anti-angiogenic. Specifically inhibits the interaction between HIF-1α/Arnt heterodimer and the hypoxiaresponsive element (HRE), reducing VEGF expression. Protein tyrosine kinase inhibitor, e.g.  $p60^{V-}$  src (IC<sub>50</sub>=0.27nM). Inhibitor of cyclooxygenase-2 (COX-2) expression (IC $_{50}$ =27nM) without affecting COX-1 expression in LPS-stimulated macrophages. Induces the differentiation of HL-60 cells into macrophages, blocking cell cycle at G1 and G2. Suppressor of NIH 3T3 cell transformation by diverse oncogenes such as mos, ras and src in part by blocking the key signal transduction intermediates such as MAP kinase and GAP-associated p62. Inhibitor of AP-1-, NF-κB- and serum response factor (SRF)-mediated transcription (e.g. expression of iNOS). Represses the transcriptional function of the estrogen receptor. Inhibits archeal growth and DNA topoisomerase VI (a Topo IIB family topoisomerase). Blocks replication of negative-strand RNA viruses. Causes morphological reversion of ras-transformed cells and leads to selective depletion of Raf kinase. Displays anti-angiogenic activity. Binds to and inhibits Hsp 90 molecular chaperone.

Citations: 28

View Online »

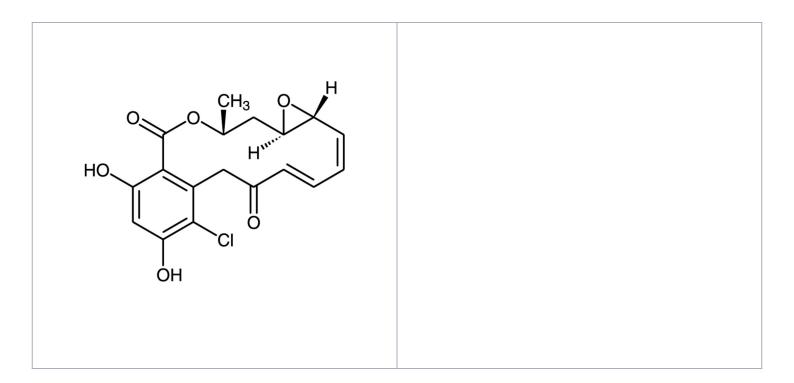
**Ordering Information** 

Order Online »

**BML-EI285-0001** 1mg

Manuals, SDS & CofA

View Online »



## **Handling & Storage**

**Use/Stability** As indicated on product label or CoA when stored as recommended.

**Handling** Protect from light.

Long Term Storage -20°C

**Shipping** Ambient Temperature

## Regulatory Status RUO - Research Use Only

### **Product Details**

**Alternative Name** Monorden, 1aS-(1aR\*,2Z,4E,14\*,15aR\*)]-8-Chloro-1a,14,15,15a-tetrahydro-9,11-

dihydroxy-14-methyl-6H-oxireno[e][2]benzoxacyclotetradecin-6,12(7H)-dione

**Appearance** White to off-white or yellowish solid. May appear adhered to vial.

**CAS** 12772-57-5

Couple Target HSP90

Couple Type Inhibitor

Formula C<sub>18</sub>H<sub>17</sub>ClO<sub>6</sub>

MI 14: 6253

**MW** 364.8

Purity ≥97% (HPLC)

**RTECS** RR1105000

**Solubility** Soluble in DMSO, methanol or acetone.

**Source** Isolated from *Humicola fuscoatra*.

