Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

# Alvespimycin

## Catalog No: tcsc0912

### Available Sizes

**Size:** 1mg

### Specifications

**CAS No:**
467214-20-6

**Formula:**
$C_{32}H_{48}N_4O_8$

**Pathway:**
Metabolic Enzyme/Protease;Cell Cycle/DNA Damage

**Target:**
HSP;HSP

**Purity / Grade:**
>98%

**Solubility:**
10 mM in DMSO

**Alternative Names:**
17-DMAG;NSC 707545

**Observed Molecular Weight:**
616.75

## Product Description

Alvespimycin is a potent inhibitor of **Hsp90**, binding to Hsp90 with an **$EC_{50}$** of 62 ± 29 nM.

IC50 & Target: EC50: 62 nM (Hsp90)[1]

***In Vitro:*** Alvespimycin is a potent inhibitor of Hsp90, binding to Hsp90 with an $EC_{50}$ of 62 nM. Alvespimycin (17-DMAG) inhibits the

Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

growth of the human cancer cell lines SKBR3 and SKOV3, which overexpress Hsp90 client protein Her2, and causes down-regulation of Her2 as well as induction of Hsp70 consistent with Hsp90 inhibition, for Her2 degradation with $EC_{50}$ of 8 ± 4 nM and 46 ± 24 nM in SKBR3 and SKOV3 cells, respectively; for Hsp70 induction with $EC_{50}$ of 4 ± 2 nM and 14 ± 7 nM in SKBR3 and SKOV3 cells, respectively[1]. Compared with the vehicle control, Alvespimycin dose-dependent apoptosis (P[2].

***In Vivo:*** The tumors are grown for two months before the start of i.p. injections every four days over one month with 0, 50, 100 and 200 mg/kg dipalmitoyl-radicicol or 0, 5, 10 and 20 mg/kg Alvespimycin. Despite sample heterogeneity, the HSP90 inhibitor-treated animals have significantly lower tumour volumes than the vehicle control-treated animals. HSP90 inhibitors have been shown to cause liver toxicity in an animal model of gastrointestinal cancer. Nevertheless, the reduction in tumor size using dipalmitoyl-radicicol is statistically significant at 100 mg/kg, while Alvespimycin at either 10 or 20 mg/kg elicits a significant reduction in tumor size[3].