Store at -20C

**17-AAG** 

500 µg



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**Background** 17-AAG is a semi-synthetic derivative of geldanamycin, demonstrating greater stability than its parent

compound (1). It binds specifically to heat shock protein HSP90 in a manner similar to geldanamycin, but with weaker binding (1). Through specific binding with HSP90, 17-AAG has been shown to decrease levels of many proteins including androgen receptor (AR), HER2, and Akt, while increasing levels of HSP90 in prostate cancer cell lines (2). 17-AAG binds to a conserved pocket in the HSP90 family of chaperone proteins and this occupation causes the degradation of several signaling proteins (2).

Molecular Formula C<sub>31</sub>H<sub>43</sub>N<sub>3</sub>O<sub>8</sub> Molecular Weight 585.7 g/mol

Purity >98%

**CAS** 75747-14-7

**Solubility** Soluble in DMSO at 50mg/ml or EtOH at 5mg/ml.

**Storage** Store lyophilized or in solution at -20°C, desiccated. Protect from light. In lyophilized form, the chemical

is stable for 24 months. Once in solution, use within 3 months to prevent loss of potency. Aliquot to

avoid multiple freeze/thaw cycles.

**Directions for Use** 17-AAG is supplied as a lyophilized powder. For a 1 mM stock, reconstitute the 500 μg in 853.7 μl DMSO.

Working concentrations and length of treatment can vary depending on the desired effect, but it is typically used at 0.1-1  $\mu$ M for 4-24 hours. Soluble in DMSO at 150 mg/mL; soluble in ethanol at 5

mg/mL. Maximum solubility in plain water estimated to be about 20-50  $\mu$ M.

**Background References** 1. Schulte, T.W. and Neckers, L.M. (1998) *Cancer Chemother Pharmacol* 42, 273-9.

2. Solit, D.B. et al. (2002) *Clin Cancer Res* 8, 986-93.

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