

Product Information

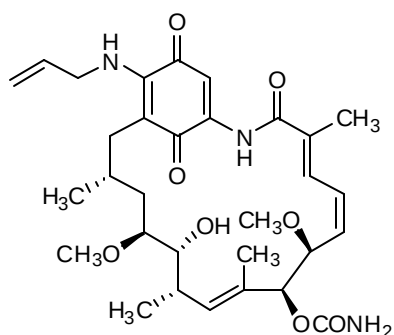
17-(Allylamino)-17-demethoxygeldanamycin

Product Number **A 8476**

Store at -20 °C

CAS RN: 75747-14-7

Synonym: 17-AAG



Product Description

Molecular Formula: $C_{31}H_{43}N_3O_8$

Molecular Weight: 585.69

17-(Allylamino)-17-demethoxygeldanamycin is a less toxic analog of the ansamycin antibiotic Geldanamycin,¹ which is a potent Inhibitor of heat shock protein 90 (Hsp90) function. Hsp90 is a molecular chaperone whose association is required for the stability and function of multiple mutated, chimeric, and over-expressed signaling proteins that promote cancer cell growth and/or survival.^{2,3} 17-AAG inhibition of Hsp90 function causes the selective degradation of several intracellular proteins regulating multiple signaling pathways and thus multiple processes such as proliferation, cell cycle regulation, and prosurvival signaling cascades. Thus it induces apoptosis and displays antitumor effect.⁴ 17-AAG inhibits the activity of oncogenic proteins such as N-ras, Ki-ras, c-Akt, and p185erbB2.⁵

Reagent

Supplied as a lyophilized film.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Soluble in DMSO (10 mg/ml), in methanol (10 mg/ml) and in chloroform (10 mg/ml), yielding a clear purple solution.

Storage/Stability

Store the product desiccated and protected from light at -20 °C. Under these conditions the product is stable for 2 years. Solutions in methanol are stable for at least 2 weeks if stored at -20 °C. Under the same conditions, solutions in DMSO are less stable, as determined by HPLC.

References

1. Schulte T.W., and Neckers, L.M., Cancer Chemother. Pharmacol., **42**, 273-279 (1998).
2. Neckers, L., Curr. Med. Chem., **10**, 733-739 (2003).
3. Basso, A.D., et al., Oncogene, **21**, 1159-1166 (2002).
4. Clarke, P.A., et al., Oncogene, **19**, 4125-4133 (2000).
5. Schnur, R.C., et al., J. Med. Chem., **38**, 3806-3812 (1995).

NDH,PHC 05/05-1

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