17-(Allylamino)-17-demethoxygeldanamycin

Product Number A 8476
Store at −20 °C

CAS RN: 75747-14-7
Synonym: 17-AAG

Product Description
Molecular Formula: C₃₁H₄₃N₃O₈
Molecular Weight: 585.69

17-(Allylamino)-17-demethoxygeldanamycin is a less toxic analog of the ansamycin antibiotic Geldanamycin, 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 overexpressed signaling proteins that promote cancer cell growth and/or survival. 1,2,3 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. 4,5 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

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