

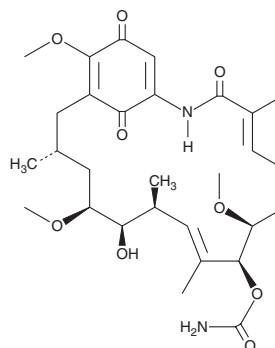
# PRODUCT INFORMATION



## Geldanamycin

Item No. 13355

**CAS Registry No.:** 30562-34-6  
**Formal Name:** 13R-hydroxy-8S,14S,19-trimethoxy-4,10,12S,16R-tetramethyl-3,20,22-trioxo-2-azabicyclo[16.3.1]docosa-1(21),4E,6E,10E,18-pentaen-9S-yl, carbamate  
**Synonym:** NSC 122750  
**MF:** C<sub>29</sub>H<sub>40</sub>N<sub>2</sub>O<sub>9</sub>  
**FW:** 560.6  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 257, 306 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Geldanamycin is supplied as a crystalline solid. A stock solution may be made by dissolving the geldanamycin in the solvent of choice, which should be purged with an inert gas. Geldanamycin is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of geldanamycin in these solvents is approximately 10 mg/ml.

If aqueous stock solutions are required for biological experiments, they can best be prepared by diluting the organic solvent into aqueous buffers or isotonic saline. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

### Description

Geldanamycin is a benzoquinone ansamycin antibiotic which binds heat shock protein 90 (Hsp90) and its paralog GRP94, altering their actions.<sup>1-3</sup> Through its interaction with these chaperones, geldanamycin indirectly affects numerous client proteins with roles in diverse cellular processes, including gene expression, cell proliferation, apoptosis, and angiogenesis. For example, geldanamycin inhibits c-jun expression in human colon adenocarcinoma HT29 cells (IC<sub>50</sub> = 75 nM), inhibiting AP-1 binding.<sup>4</sup> It also reduces signaling through mitogenic signaling proteins and interferes with steroid receptor function.<sup>1,5-7</sup> Inhibitors of Hsp90, including geldanamycin, show promise in cancer therapy.<sup>8</sup>

### References

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#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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