



# Data Sheet

Research Use Only

## Compound Name

Geldanamycin

## Catalog Number

SM55

## Alternative Names

Geldanomycin, U-29135, NSC 122750, (4E,6Z,8S,9S,10E,12S,13R,14S,16R)-13-Hydroxy-8,14,19-trimethoxy-4,10,12,16-tetramethyl-3,20,22-trioxo-2-azabicyclo[16.3.1]docosa-1(21),4,6,10,18-pentaen-9-yl carbamate

## Activity

Geldanamycin is a natural existing HSP90 (Heat Shock Protein 90) inhibitor, specifically disrupts glucocorticoid receptor (GR)/HSP association. The Hsp90 chaperone is required for the activation of several families of eukaryotic protein kinases and nuclear hormone receptors, many of which are proto-oncogenic and play a prominent role in cancer.

## Effect

Geldanamycin has antiproliferative and antitumor effects, as it binds to Hsp90, inhibits the Hsp90-mediated conformational maturation/refolding reaction. It interferes with cellular stress response. Geldanamycin decrease the expression of hypoxia inducible factor (HIF-1alpha) in neural stem/progenitor cells.

## Purity

>99%

## CAS

30562-34-6

## Formula

$C_{29}H_{40}N_2O_9$

## Molecular Weight

560.64

## Solubility

DMSO

## Stability

Stable at -20°C. Keep away from direct sunlight.

## References

1. Whitesell, L., et al. 1994. Proc Natl Acad Sci USA. 91(18): 8324-8328. PMID: 8078881
2. Xiong, L., et al. 2009. Cell Stress Chaperones. 14(2): 183-192. PMID: 18726712
3. Minuth, WW., et al. 2010. Adv Drug Deliv Rev. 62(7-8): 841-854. PMID: 20122975