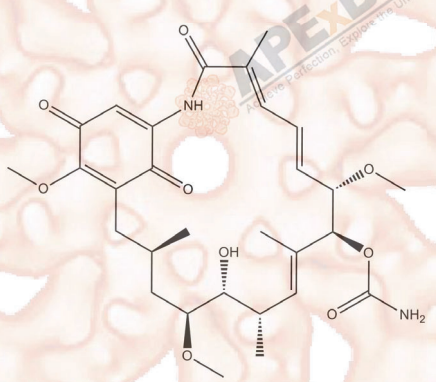
Geldanamycin



Cat. No.:	A4060
CAS No.:	30562-34-6
Formula:	C29H40N2O9
M.Wt:	560.6
Synonyms:	
Target:	Proteases
Pathway:	HSP
Storage:	Store at -20°C

Solvent & Solubility

In Vitro

⩾16.9 mg/mL in DMSO,insoluble in EtOH, insoluble in H2O

Preparing Stock Solutions

Concentration \ Mass / Solvent	1mg	5mg	10mg
1 mM	1.7838 mL	8.9190 mL	17.8380 mL
5 mM	0.3568 mL	1.7838 mL	3.5676 mL
10 mM	0.1784 mL	0.8919 mL	1.7838 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary	Hsp90 inhibitor,potent and specific
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	A2780 cells
Preparation method：	The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	0.001 ~ 10 μM; 3 hrs
Applications:	In human ovarian cell line A2780, Geldanamycin caused a dose-dependent G2

		arrest and reversible inhibiton of entry into the S phase.
In Vivo	**Animal experiment**	
	Animal models:	Mice bearing FRE/erbB-2 tumors
	Dosage form:	50, 100, 200 and 400 mg/kg; i.p.; b.i.d., for 5 days
	Applications:	In mice bearing FRE/erbB-2 tumors, Geldanamycin (50 mg/kg) shows 30% inhibition on p185-associated phosphotyrosine levels.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

1. Deng X, Song L, et al. "HAX-1 Protects Glioblastoma Cells from Apoptosis through the Akt1 Pathway." Front Cell Neurosci. 2017 Dec 21;11:420.PMID:29311840

2. Guo XB, Deng X, et al. "Hematopoietic Substrate-1-Associated Protein X-1 Regulates the Proliferation and Apoptosis of Endothelial Progenitor Cells Through Akt Pathway Modulation." Stem Cells. 2018 Mar;36(3):406-419.PMID:29139175

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References

[1]. Roe SM, Prodromou C, O'Brien R, Ladbury JE, Piper PW, Pearl LH. Structural basis for inhibition of the Hsp90 molecular chaperone by the antitumor antibiotics radicicol and geldanamycin. J Med Chem. 1999 Jan 28;42(2):260-6.

[2]. McIlwrath AJ, Brunton VG, Brown R. Cell-cycle arrest and p53 accumulation induced by geldanamycin in human ovarian tumour cells. Cancer Chemother Pharmacol. 1996;37(5):423-8.

[3]. Schnur RC, Corman ML, Gallaschun RJ, Cooper BA, Dee MF, Doty JL, Muzzi ML, Moyer JD, DiOrio CI, Barbacci EG, et al. Inhibition of the oncogene product p185erbB-2 in vitro and in vivo by geldanamycin and dihydrogeldanamycin derivatives. J Med Chem. 1995 Sep 15;38(19):3806-12.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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