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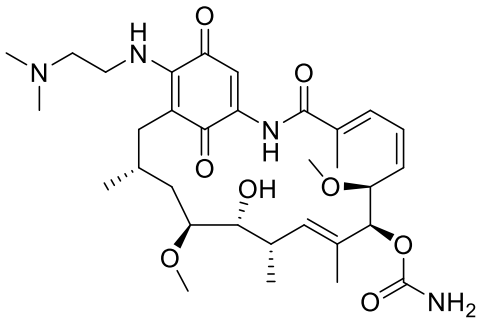
PRODUCT DATA SHEET

17-Dimethylaminoethylamino-17-demethoxygeldanamycin

Code No.: **BIA-D1924**

Pack sizes: **1 mg, 5 mg**



Synonyms : Alvespimycin, DMAG, NSC 707545, 17-DMAG

Specifications

CAS #	:	**467214-20-6**
Molecular Formula	:	**$C_{32}H_{48}N_4O_8$**
Molecular Weight	:	**616.75**
Source	:	**Semi-synthetic**
Appearance	:	**Purple solid**
Purity	:	**>95% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in methanol or DMSO**

Application Notes

17-Dimethylaminoethylamino-17-demethoxygeldanamycin (DMAG, alvespimycin) is a semi-synthetic derivative of the benzoquinone ansamycin antibiotic isolated from Streptomyces hygroscopicus in which the methoxy group attached to the benzoquinone moiety has been replaced by a 2-(N,N-dimethylamino)ethylamino group. DMAG acts by binding to the 90-kDa heat shock protein (Hsp90) essential to maintain the conformation, stability, activity and cellular localisation of several key oncogenic proteins such as ERBB2, C-RAF, CDK4, AKT/PKB, steroid hormone receptors, mutant p53, HIF-1α, survivin and telomerase hTERT. DMAG is more potent than geldanamycin and 17-allylamino-17-demethoxygeldanamycin (17AAG) as an inhibitor of Hsp90.

References

1. Pharmacologic shifting of a balance between protein refolding and degradation mediated by Hsp90. Schneider C. et al., Proc Natl Acad Sci. 1996, 93, 14536.
2. Mechanistic studies on Hsp90 inhibition by ansamycin derivatives. Onuoha S.C. et al. J Mol Biol. 2007, 372, 287.
3. Comparison of 17-dimethylaminoethylamino-17-demethoxy-geldanamycin (17DMAG) and 17-allylamino-17-demethoxygeldanamycin (17AAG) in vitro: effects on Hsp90 and client proteins in melanoma models. Smith V. et al. Cancer Chemother Pharmacol. 2005, 56, 126.

Updated: 11 June 2021

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