

AR03024PU-N

HSP90 Inhibitor - Purified

Alternate names:

17-AAG

Quantity:

1 mg

Background:

Glendanamycin (GA), a benzoquinone ansamycin antibiotic, interferes with the action of Hsp90 leading to degradation of Hsp90 client proteins. GA itself however has undesirable properties such as poor aqueous solubility and liver toxicity; therefore, numerous analogs have been synthesized, such as 17-AAG(1). 17-AAG is an HSP-90 inhibitor that displays a 100-fold higher affinity for HSP-90 derived from tumor cells compared to HSP-90 from normal cells(2). 17-AAG inhibits Akt activation and expression in tumors and synergizes with a number of antitumor agents such as taxol(3), cisplatin(4) and UCN-01 (400 nM 17-AAG, U937 cells)(5).

Source:

Synthetic.

Format:

State: Purple solid

Purity: >98% pure (TLC: 5% Methanol/Methylene Chloride, Rf=0.26).

Reconstitution: Soluble in DMSO (>50 mg/ml) or Methanol (5 mg/ml).

Description:

Red to dark red powder.

CAS No: 75747-14-7

Formula: C₃₁H₄₃N₃O₈

Molecular weight: 558.7

Storage:

Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:

1. Neckers L. (2002) Trends Mol Med. 84: S55-61.
2. Kamal A., et al.(2003) Nature 425: 407.
3. Solit D.B., et al.(2003) Cancer Res. 63: 2139.
4. Vasilevskaya I.A., et al. (2003) Mol.Pharmacol. 2003 65: 235.
5. Jia W., et al.(2003) Blood 102: 1824.

Pictures:

Figure 1: Structure of 17-AAG

