# 17-GMB-APA-GA

A geldanamycin analogue for conjugation to a monoclonal antibody

Catalog # gmbapa-ga

# For research use only

Version # 16D07-MM

## PRODUCT INFORMATION

#### Content:

1 mg of 17-GMB-APA-GA is supplied as a lyophilized purple powder.

#### **Storage and stability:**

- 17-GMB-APA-GA is shipped at room temperature. Store lyophilized product at -20 °C in the dark. Protect from light. Lyophilized product is stable for 6 months when stored properly.
- Once solublized 17-GMB-APA-GA should be aliquoted and stored at -20 °C. Protect from light. Avoid repeated freeze-thaw cycles. Resuspended product is stable for 3 months when properly stored.

## **QUALITY CONTROL**

• Purity: ≥90% (UHPLC).

## **BACKGROUND**

17-GMB-APA-GA is a maleimido derivative of geldanamycin that enables the conjugation of GA to a monoclonal antibody (mAb) such as Herceptin, the first mAb approved for therapy of solid tumors. This geldanamycin immunoconjugate induces less systemic toxicity than GA by being selectively delivered into malignant cells, a property conferred by the mAb that acts as the targeting vehicle. NCI has reported that Herceptin-GA conjugates deliver a more potent selective cytotoxic impact to Her2-overexpressing tumors than Herceptin alone<sup>1</sup>. To prepare such conjugates, GA is modified to introduce a latent primary amine<sup>2</sup>. After deprotection, this primary amine provides a site for introduction of a maleimide group that enables linkage to proteins.

1. Mandler R. et al., 2004. Herceptin-geldanamycin immunoconjugates: pharmacokinetics, biodistribution, and enhanced antitumor activity. Cancer Res. 64(4):1460-7. 2. Mandler R. et al., 2002. Modifications in synthesis strategy improve the yield and efficacy of geldanamycin-herceptin immunoconjugates. Bioconjug Chem. 13(4):786-91.

#### **CHEMICAL PROPERITIES**

Formula: C39H53N5O11 Molecular weight: 768

Solubility: DMSO (10 mg/ml)

**Structure:** 

#### RELATED PRODUCTS

| Product                              | Catalog Code          |
|--------------------------------------|-----------------------|
| Geldanamycin<br>17-AAG (GA analogue) | ant-gl-5<br>ant-agl-5 |
| 17-DMAG (water soluble GA analogue)  | ant-dgl-5             |



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