

**PRODUCT INFORMATION**

<b>Applications</b>	Payload-mediated cytotoxicity-based antibody internalization reagent
<b>Detection method</b>	Cell viability detection with MTT, CCK8, or CTG
<b>Molecular Weight</b>	The product has a MW of 34 kDa
<b>Formulation &amp; Reconstitution</b>	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8% trehalose is added as protectants before lyophilization. Please see Certificate of Analysis for specific instructions of reconstitution.
<b>IgG type</b>	The DiTag™ MMAE IgG labeling reagents can be used for human IgG1, IgG2 and IgG4, rabbit IgG, mouse IgG2a and IgG2b.
<b>Recommended Dilutions</b>	We recommend test antibody to mix with AME100003 at 2:1 in molar
<b>Description</b>	DiTag™ MMAE IgG labeling reagent
<b>Delivery</b>	in Stock
<b>Storage &amp; Shipping</b>	The reagents are supplied in lyophilized form. We recommend storing the vial(s) at -20°C, desiccated and protected from light. Once reconstituted, the reagents can be stored at 2-8°C for 1~2 weeks, or with 50% glycerol at -20°C.
<b>Background</b>	DiTag™ MMAE IgG labeling reagents provide an easy solution for quantifying antibody internalization activities. Leveraging VcMMAE (MC-VC-PABC-MMAE) conjugated to an Fc binding protein, these reagents bind to IgG antibodies from various species, resulting in the formation of a VcMMAE-labeled antibody-reagent complex. Upon antibody internalization, the cleavable linker MC-VC-PABC is enzymatically cleaved by cathepsin B, a protein overexpressed in multiple cancer types. This enzymatic cleavage triggers the release of PABC-substituted MMAE, forming an unstable intermediate that liberates the free drug. Measurement of cell killing or inhibition allows researchers to evaluate the efficiency of antibody internalization into cells. This critical information enhances our understanding of the cellular uptake mechanism of antibodies and aids in assessing their efficacy in targeted therapies or diagnostic applications.
<b>Usage</b>	Research use only



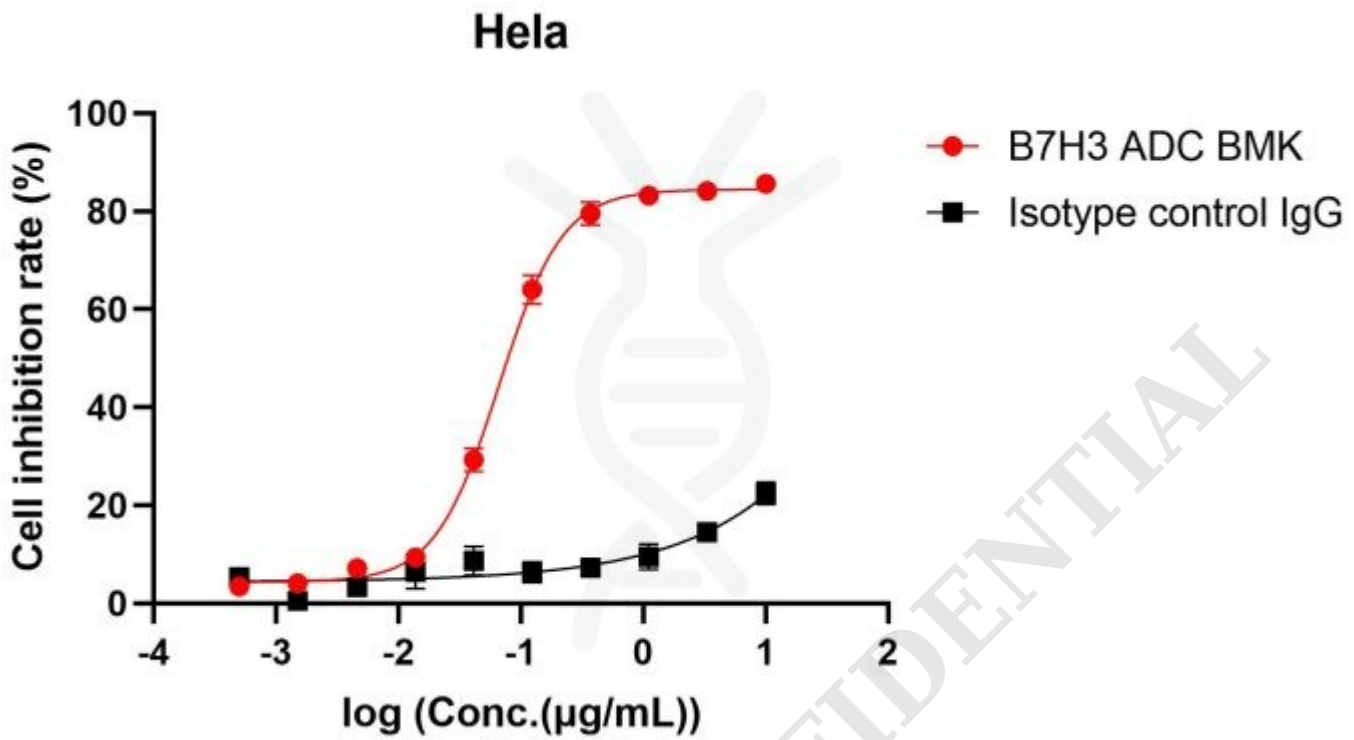


Figure 1. Cell inhibition rate of Hela detected by CCK8 method. The IC50 of B7H3 ADC BMK is 66ng/ml, indicating specific internalization.

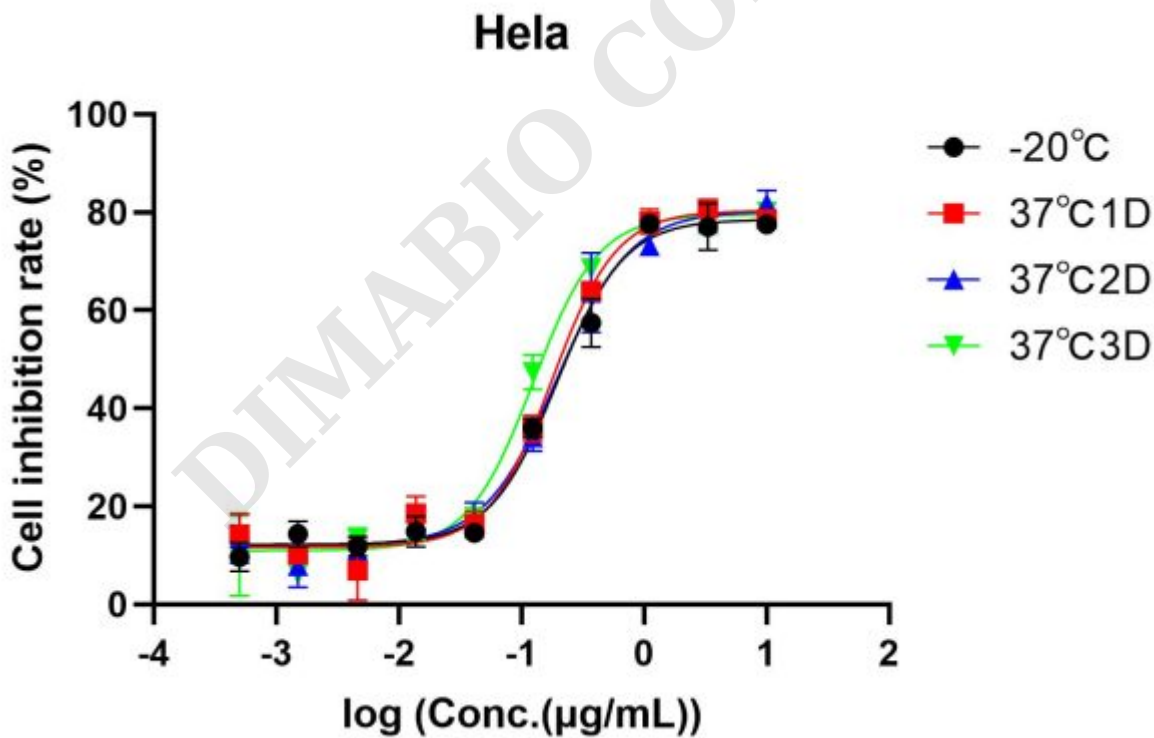


Figure 2. Accelerated stability test of AME100003. Following lyophilization, samples were stored at -20°C (black), 37°C for 1 day (red), 37°C for 2 days (blue), and 37°C for 3 days (green), separately. Upon reconstitution, the cell inhibition rate of each sample was determined using the CCK8 method. The data indicate excellent stability for all samples.

