

**PRODUCT INFORMATION**

<b>Applications</b>	Antibody internalization labeling reagent
<b>Detection method</b>	Cell viability detection with MTT, CCK8, or CTG
<b>Excitation-Emission</b>	N/A
<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



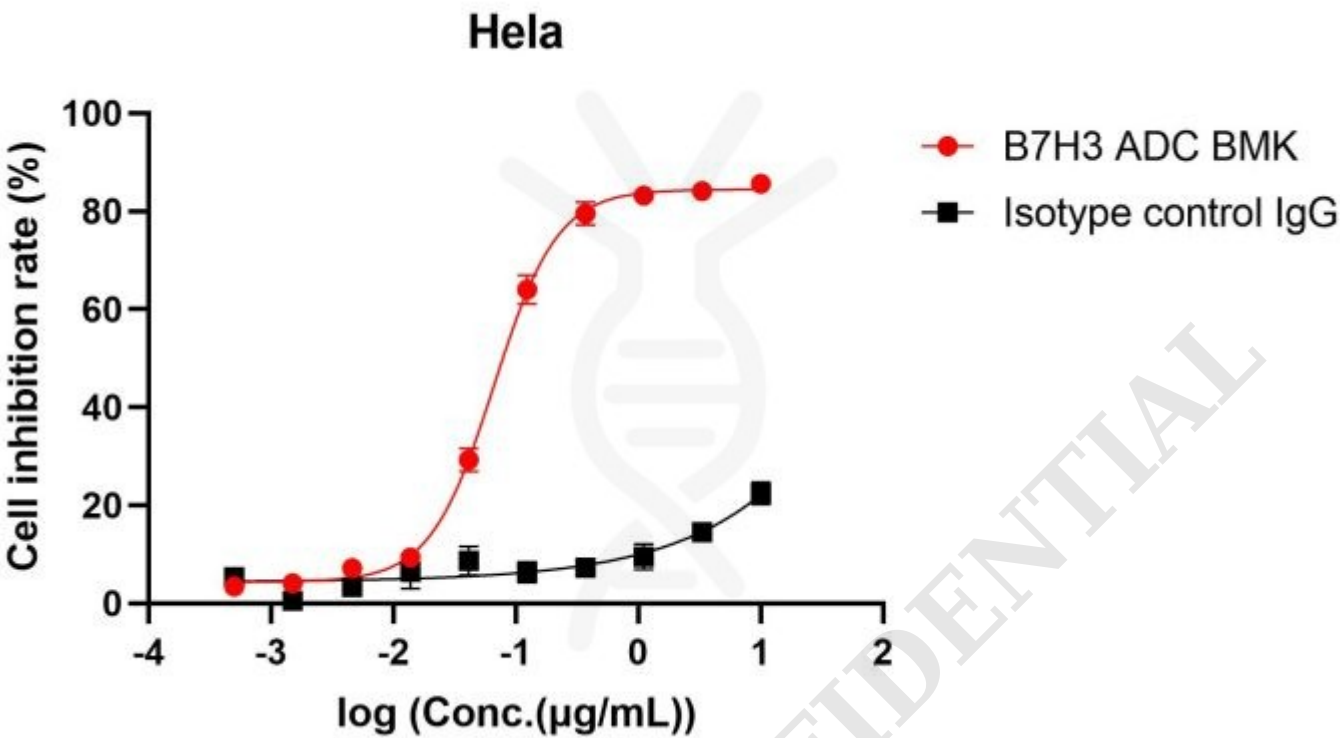


Figure 1. Cell inhibition rate of Hela detected by CCK8 method. The IC50 of B7H3 ADC BMK is 66ng/ml, indicating specific internalization.

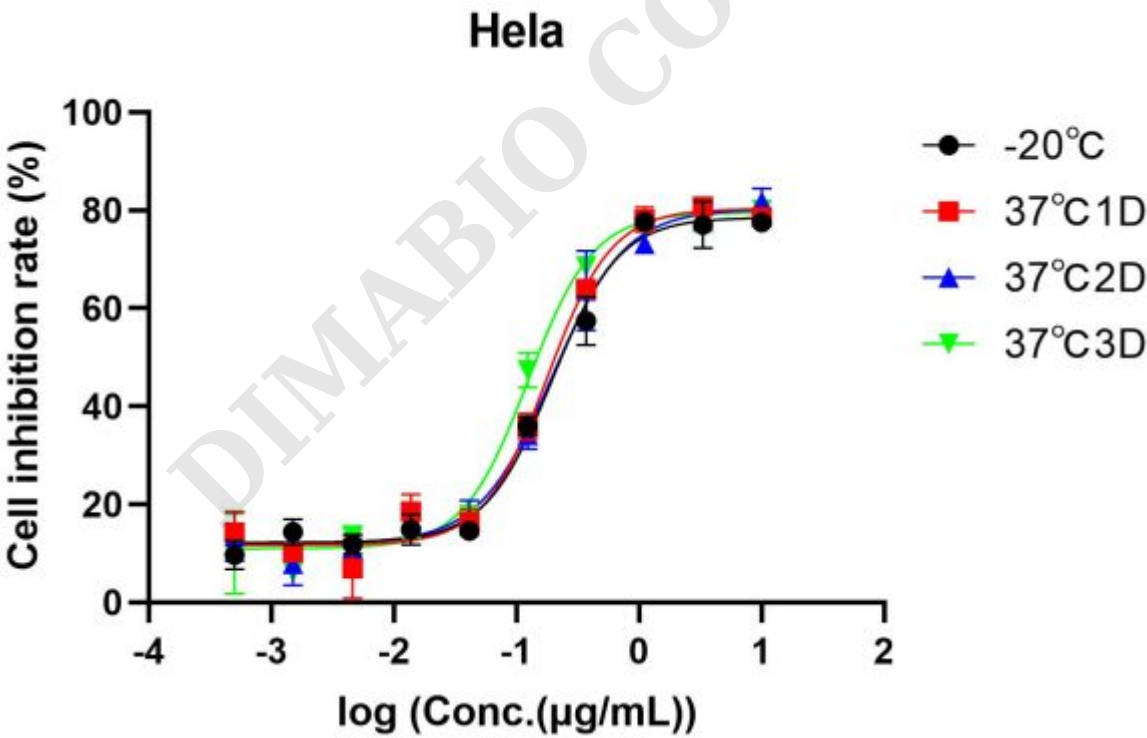


Figure 2. Accelerated stability test of AME100003. Following lyophilization, samples were stored at -20°C (black), 37°C for 1 day (red), 37°C for 2 days (blue), and 37°C for 3 days (green), separately. Upon reconstitution, the cell inhibition rate of each sample was determined using the CCK8 method.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

[title text="FAQ"]



[col span\_\_sm="12"]

1. **Q:** 待测抗体与 **AME100002** 按照质量比稀释混合，得到 **Ab-AME100002** 复合物，标记完的抗体是否可以保存，保存条件是什么？

**A:** 我们没有进行具体的测试，建议您现配现用。

2. **Q:** **AME100001**试剂的原理以及如何算出内吞率？

**A:** **DiTag™ pH-sensitive IgG labeling reagent**利用pH敏感的荧光标记的Fc结合蛋白与来自不同物种的IgG抗体结合，从而形成荧光标记的抗体-试剂复合物。抗体内化后，周围pH变为酸性，显著增强抗体-试剂复合物的荧光信号。荧光强度可作为判断抗体内化活性的指标，通过测量荧光信号的强度，研究人员可以评估抗体内化进入细胞的效率。阳性率需要根据客户的实验设计去进行计算，阳性率计算的是内吞阳性细胞的百分比。

3. **Q:** **DiTag™ pH-sensitive IgG labeling reagent**, **MFI**能达到多少？不同细胞信号值差多少？有些细胞会不会检测不到？

**A:** MFI值与不同的细胞，不同的流式检测方式都有关系，不同细胞类型的MFI值可能不同，抗原低表达的细胞是有测不出来的风险。DIMA Biotechnology的实验数据表明FITC的MFI值为 $3 \times 10^4$ 。

4. **Q:** **AME100001**和**AME100002**的区别？

**A:** 主要区别在于它们对不同IgG抗体的亲和力，更多信息请参考下表。

[table id=50 /]

[/col]

[/row]

