

## **Cy7-Antibody conjugation Kit**

#### Cat No: BIOK1966

#### Description

Immunofluorescence technique is to label a known antibody or antigen molecule with fluorescein. When it reacts with the corresponding antigen or antibody, there is a certain amount of fluorescein on the formed complex. Below you can see the fluorescent antigen-antibody binding site and detect the antigen or antibody. The main features of this technology are: strong specificity, high sensitivity and fast speed.

Fluorescein-labeled antibody is abbreviated as fluorescent antibody (FA), which is currently widely used in immunopathology, cytochemistry, flow cytometry, virology and autoantibody clinical immunodiagnosis of specific, sensitive, qualitative and localized immune Chemical reagents. Antibodies used for labeling require high specificity and high affinity. The antiserum used should not contain antibodies against normal tissues in the specimen. Generally, IgG and IgM need to be purified and extracted before labeling.

The fluorescein in this kit uses high-quality imported Cy7. Cy7 absorbs very low background in the near-infrared region, and is the long-wavelength dye with the highest fluorescence intensity and the most stable. It is especially suitable for in vivo imaging of small living animals instead of radioactive elements.



## **PRODUCT INFORMATION**

Cy7	1 支 (避光)
调整缓冲液	50ul
DMSO	150ul
纯化柱	2 支
收集管	2 个



### NOTES

1. Store the kit at 2-8  $^\circ\!\mathrm{C}$  , do not freeze.

2. The components of the kit may be upside down during transportation, causing liquid or dry powder reagents to stick to the tube wall or bottle cap. Please centrifuge before use to make the liquid or dry powder reagent attached to the tube wall or bottle cap settle to the bottom of the tube.

3. Cy7 needs to be prepared for immediate use, and the dissolved Cy7 cannot be stored for a long time.

4. The buffer in the purification column contains the toxic component sodium azide (NaN3). Avoid contact with skin, eyes and mucous membranes when using it.5. DMSO is slightly toxic, permeable to human skin and irritating to the eyes. Avoid

contact with skin, eyes and mucous membranes when using it.

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6. The dialysis, concentration and concentration determination of the antibody before labeling will all cause the loss of the amount of antibody. Therefore, when preparing the antibody before labeling, consider the most appropriate amount of antibody according to the specific situation.

# Steps

1. Antibody preparation

1.1. 建议抗体浓度在 1-2mg/ml 之间。

1.2. 抗体中不要含有 BSA 或其它蛋白质成分。

**1.3.** 抗体缓冲液中不要含有氨基的盐(如: Tris, NaN3等), pH 在 6.5-8.5为 宜。

## 2. Antibody labeling

2.1. 取出 Cy7 离心数秒,将管中 Cy7 干粉甩至管底;

2.2. 管中加入 50ul DMSO 用移液枪反复吹打或 vortex 混匀至 Cy7 完全溶解;

2.3. 抗体中加入适量调整缓冲液(每 100ul 抗体中加入 10ul 调整缓冲液);

2.4. 将溶解后的 Cy7 加入抗体中(每 100ug 抗体中加入 4.0ul Cy7),用移液枪 反复吹打或 vortex 混 匀。

2.5. 将抗体-Cy7 混合物置水平摇床或旋转混匀仪,在摇动状态下室温避光(反应管可包裹锡箔纸)反应 1h。

注:如果需要较高 F/P 值,可适当延长抗体和 Cy7 偶联时间。

## 3. Free Cy7 removal

3.1. 取出纯化柱,装入分子筛填料,将纯化柱 3000rpm 离心 2min。

3.2. 暂时保留收集管中的缓冲液。

3.3. 将纯化柱移至新的收集管上,吸取抗体-Cy7 偶联物置纯化柱中填料的表面。 如果样品体积小于 50ul,应先用 3.2 保留的缓冲液将液体量补足 50ul。上样体积 最大不要超过 100ul。

3.4. 待样品渗入填料后, 3000rpm 离心 2min。为保证去除效果, 此操作可重复



1-2 次。

3.5. 将抗体-Cy7标记物4℃避光保存待用,终产品可4℃可避光保存1年。

## **Contact Us**

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