(This kit is for research use only, not for clinical diagnosis!)

BSA Removal Kit for Antibodies

Catalog Number: RE80028

Size: 1 mL

Please read the instructions carefully before use. If you have any questions, please contact us via the following methods:

Web: https://www.enkilife.com/

E- mail: order@enkilife.com techsupport@enkilife.com

Tel: 0086-27-87002838

Product Introduction

Bovine serum albumin (BSA) is often added to purified antibodies as an effective stabilizer. However, when labeling antibodies, BSA becomes an obstacle because it directly competes with the antibody for binding to the relevant chemical conjugate, thereby reducing the labeling efficiency. Therefore, BSA must be removed when using certain labeling methods. Common commercial BSA removal techniques may involve many laborious steps, such as protein A/G or antigen affinity purification, molecular exclusion purification or other purification methods, which require high conditions and costs.

EnkiLife's BSA Removal Kit for Antibodies uses a simple method that only takes 10 to 15 minutes to effectively separate BSA from antibodies. The purified antibodies can be directly used for subsequent labeling operations of EnkiLife's various labeling kit products. This kit is suitable for IgG antibody subtypes of various species.

Features

- The operation is simple and quick, and no complicated instruments or consumables are required. The whole process may takes as little as only 15 minutes.
- The purification effect is good, and more than 95% of BSA can be removed.
- The applicable antibody concentration and BSA concentration are relatively wide, with good effects when the antibody content is as low as 50μg and the BSA content is as high as 0.5% (5mg/mL).

Self-provided instruments and consumables

High-precision pipette, centrifuge (maximum centrifugal force can reach 13000×g), 37°C constant temperature water bath or incubator, disposable pipette tips, 1.5mL centrifuge tube.

Product composition

Components	Specification	Storage temperature
Reagent 1	1 mL / tube × 1	2~8 °C
1× PBS (pH 7.4)	2 mL / tube × 1	2~8 °C

Storage conditions

The unopened test kit can be stored at 2~8° C for one year.

Operation process

Preparation before the experiment

1. Read the instruction manual carefully.
2. Take the kit out of the refrigerator 20 minutes in advance to allow all components of the kit to equilibrate to room temperature. Reagent one may have precipitates that are difficult to dissolve completely. It can be dissolved by heating in a water bath or incubator at 37°C for 10 minutes.
3. If the BSA concentration is high, dilute the antibody mixture with deionized or distilled water until the BSA concentration is at or below 0.5%.
4. The applicability of the antibody samples in the kit is as follows:

Components of the antibody solution	Kit Compatibility
gelatin	No, use other purification methods to purify the antibody
Glycerol>15%	No, dilute the antibody with deionized or distilled water to a glycerol concentration of 15 % or less.

Contains BSA> 0.5% (5mg/mL)	No, dilute the antibody with deionized or distilled water to a BSA concentration of 0.5% or less.
Contains sodium azide, Tris, glycine, Proclin, EDTA, trehalose, sucrose, or other small molecule additives, salt ions, etc.	Yes, can be used as buffer exchange
6.0<pH<8.0	Yes, if it exceeds this range, you can add acid-base buffer to adjust it or contact our technical staff

Procedure

1. If reagent 1 is not completely dissolved, centrifuge it at 13,000 × g for 1 minute and keep the supernatant for use. Add 80 µL of reagent 1 to every 100 µL of antibody solution (antibody sample meets the suitability standard), mix well and incubate at room temperature for 5 minutes.
2. Centrifuge the above mixture at 13000 × g at room temperature for 5 minutes. A small white precipitate can be seen at the bottom of the centrifuge tube. Quickly and carefully pipette the supernatant into another microcentrifuge tube and temporarily store it at 4°C until the subsequent experiment is successful. The small white precipitate at the bottom is the separated and purified antibody.

Note: When the amount of antibody is small, the white precipitate is difficult to observe. Therefore, when placing the centrifuge tube on the centrifuge, pay attention to the direction of the centrifuge tube and the final bottom position of the centrifuge tube to facilitate observation and subsequent supernatant aspiration operations.

3. According to the original amount of antibody taken and the required antibody concentration, estimate the volume of 1×PBS (pH7.4) or other buffer to be added to resuspend the antibody white precipitate. After aliquoting, store the antibody at -20°C or -70°C, or resuspend the antibody in labeling buffer according to actual needs for subsequent labeling steps.

Precautions

1. This product is intended solely for research purposes.
2. The purified antibodies can be tailored to the experimental protocols of the EnkiLife Labeling Kit.
3. The antibody type mentioned in this kit is the IgG antibody. Types such as IgM, IgA, IgD, IgE, IgY, or other recombinant antibodies and antibody fragments have not been evaluated. The effectiveness of the purification process may differ among various antibody types.
4. For your safety and well-being, it is essential to wear a lab coat and disposable gloves during operation.