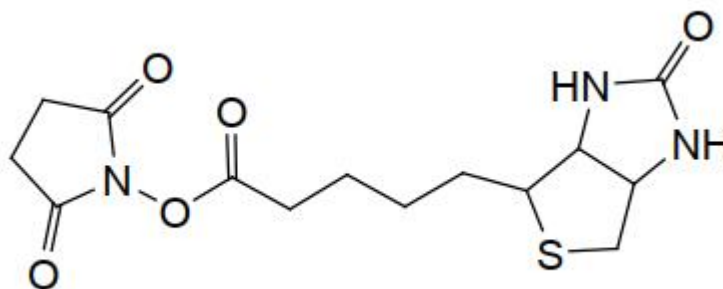


Product Information

Proteintech's Biotin Labeling Kit provides a complete set of reagents required for biotin labeling. The kit is designed for labeling antibodies containing amino groups (NH₂-). The biotin included in the kit is pre-activated and ready for direct use, and can be used to label 0.1–5 mg of antibody. The kit also includes buffer, ultrafiltration tubes, and protective solution. Antibodies do not require dialysis, the procedure is simple, and the entire workflow can be completed in only 90 minutes.

Basic Information:

Structural Formula:



Molecular Weight: 341.4

Product Features:

1. Comprehensive: This kit provides all components required for biotin labeling.
2. Fast: The entire process takes only 90 minutes.
3. Convenient: No dialysis required for antibodies.
4. Flexible: Wide labeling range, 0.1–5 mg of antibody.
5. Stable: The product has passed an accelerated stability test at 37 °C for 4 days with qualified results.

Recommended Applications: This kit is used for biotin labeling of antibodies or proteins. The labeled antibodies, upon validation, are suitable for the vast majority of ELISA applications and some IHC applications.

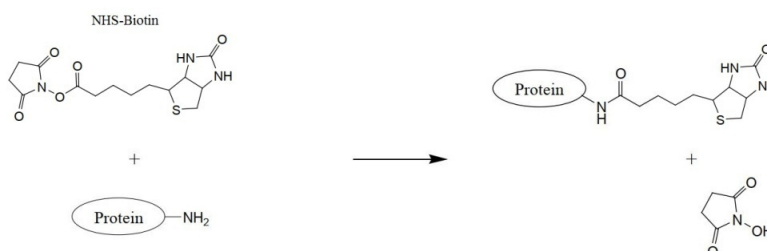
Component	Size	Size
	2 Labeling Reactions	5 Labeling Reactions
Maximum Antibody Amount	2 mg	5 mg
NHS-bio	0.1 mg/vial × 2	0.1 mg/vial × 5
Labeling Buffer	15 mL × 1	30 mL × 1
DMF	200 uL × 1 vial	200 uL × 1 vial
Ultrafiltration Tube	0.5 mL × 4	0.5 mL × 10
Antibody Protective Solution	1 mL	2 mL

Note: Unopened kit can be stored at 2–8 °C for 1 year. Dissolved biotin can be stored at 2–8 °C for 1 week.

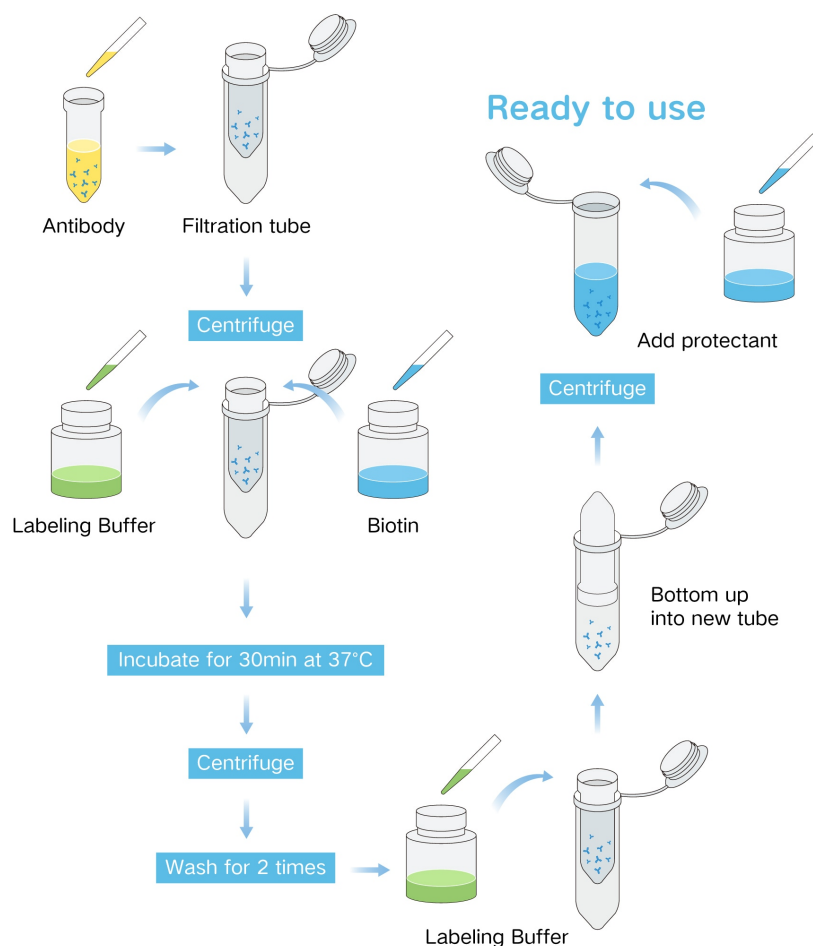
Materials Required But Not Provided:

1. Pipettes and disposable tips.
2. 37 °C constant-temperature incubator.
3. Centrifuge.

Labeling Principle:



Instructions:



Package

Others

Cautions

2 labeling reactions / 5 labeling reactions

1. Please read this manual carefully before the experiment.
2. This kit is for research use only and not for clinical diagnosis.

1. This kit can also label other amino-containing antigens, HRP, and peptides. The specific labeling ratio depends on the number of amino groups in the substance to be labeled. If labeling proteins, it is recommended to adjust the protein concentration to 2 mg/mL, at which point the protein: biotin molar ratio is 1:20.

Calculation method for the amount of biotin to be added:

$$\text{mL Protein} \times \frac{\text{mg Protein}}{\text{mL Protein}} \times \frac{\text{mmol Protein}}{\text{mg Protein}} \times \frac{20 \text{ mmol Biotin}}{\text{mmol Protein}} = \text{mmol Biotin}$$

2. For a 10 mmol biotin solution, the calculation method for the volume of biotin to be added to the reaction:

$$\text{mmol Biotin} \times \frac{1,000,000 \text{ uL}}{\text{L}} \times \frac{\text{L}}{10 \text{ mmol}} = \text{uL Biotin}$$

3. DMF should be stored sealed and dry.
4. The ultrafiltration tubes provided in this kit have a molecular weight cutoff of 10 KD. Labeled antigens or peptides should have a molecular weight of 20 KD or above.
5. Please calculate the required amount of biotin according to the amount of antibody to be labeled before labeling.

For technical support and original validation data for this product please contact

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Proteintech Group brand and is not available
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