(FOR RESEARCH USE ONLY. DO NOT USE IT IN CLINICAL DIAGNOSIS!)

HRP Labeling Kit

Catalog No.: RE80004

Size: 0.5mg/1mg/5mg

If you have any questions or need further help during experiment, please don't hesitate to contact us through the following methods:

✉Email (Sale) order@enkilife.com

✉Email (Techsupport) techsupport@enkilife.com

Tel: 0086-27-87002838

Website: www.enkilife.com

Shelf life: Please refer to the label on the outer package.

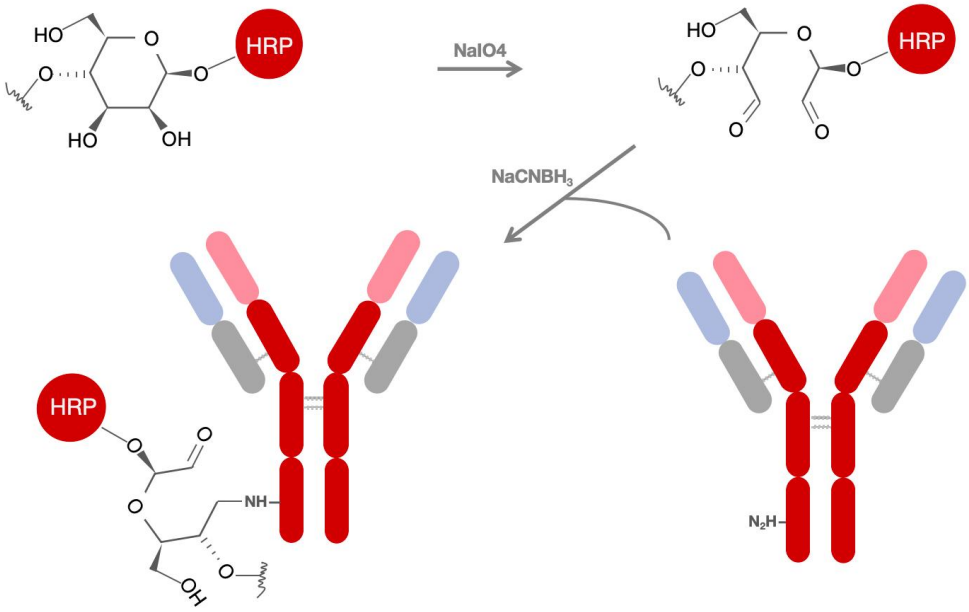
Techsupport: In order to provide you with better service, please inform us the lot number on the label of the outer package.

Product Introduction

This kit is suitable for labeling substances with free amino groups, such as small molecular compounds, proteins, or antibodies with free amino groups (primary amines).

Labeling Principle

The kit uses a modified iodine oxidation method to activate horseradish peroxidase (HRP). After oxidation, the activated HRP can bind to the free amino groups of the labeling material, undergoing a Schiff's base reaction. This kit is suitable for labeling substances with free amino groups, such as small molecular compounds, proteins, or antibodies with free amino groups (primary amines).



Product Components

Component	Contents in different sizes:		
Horseradish Peroxidase (10mg/mL)	0.5 mg	1 mg	5 mg
Labeling Buffer	5 mL	15 mL	30 mL * 2
Labeling Termination Powder	2.5 mg	2.5mg * 2	2.5 mg * 5
Storage Buffer	2 mL	2 mL*2	10 mL

Storage

The kit is shipped under low temperature. After receipt, please store it at 2-8℃ and it can be preserved for 3 months.

Operation Process

Preparation Before Experiment

1. Read the user manual carefully.
2. Take the kit out of the refrigerator 30 minutes in advance to allow the components to equilibrate to room temperature.

Special Note

Prepare the labeling material at this time: It is best for the labeling material to be in a 0.01M pH7.4 PBS environment and should not contain glycerol, sodium azide, amino acids (including glycine, Tris, etc.), EDTA, or other substances. If these substances are present, they need to be thoroughly dialyzed or ultrafiltered with 0.01M pH7.4 PBS buffer solution to remove these substances and ensure labeling efficiency; adjust the concentration of the labeling material to an appropriate concentration, with the antibody concentration adjusted to around 2mg/mL; for small molecular materials, the experimenter needs to explore the concentration to ensure that the proportion of HRP is in excess. If you cannot ensure that HRP is in excess, it is best to dialyze or filter out unlabeled small molecular materials after labeling.

Labeling Steps

1. Labeling Reaction: Add 1/10 volume of labeling buffer to the solution of the labeling material, mix well with a pipette gun several times to avoid bubbles; take an equal volume of horseradish peroxidase and add it to the labeling material, mix well with a pipette gun several times to avoid bubbles, and react at room temperature in the dark for about 2 hours.
2. Termination of Labeling Reaction: Add 1mL of deionized water to the reaction

termination powder tube to prepare the reaction termination solution [2.5mg/ml], and add an appropriate amount of reaction termination solution to the reaction liquid in step 2, with a ratio of: 1μL of reaction termination solution for every 10μL of reaction liquid. Mix well and place at room temperature for 1 hour.

3. Collection and Preservation of Labeled Material: After termination, add an equal volume of preservation solution for labeled material, mix well, and store at -20℃.

Appendix: Antibody Labeling Reference Table (This table is for reference only)

HRP Enzyme Amount	Recommended Labeled Antibody Amount	Optimal Reaction Volume
500 μg	500 μg	500 μl
1000 μg	1000 μg	1000 μl
5000 μg	5000 μg	5000 μl

Declaration: This table is for reference only, and specific conditions should be explored by experimental personnel according to actual situations.