

Hypersensitive chemiluminescence (ECL) kit

Product Information

Catalog No.:	ES-0006
Size:	100mL/500mL
Form:	liquid
Compatibility:	Nitrocellulose membrane and PVDF membrane
Detection method:	Chemiluminescence
Substrate type:	HRP (horseradish peroxidase) substrate
Storage:	It is recommended to store the product at 2–8 °C. Keep the container tightly closed and keep away from heat and light. The product is stable for a minimum of 18 months when stored in the dark at 2–8 °C.

Background

Enhanced chemiluminescence (ECL) substrate is a two-components product for the detection of horseradish peroxidase. This substrate is a highly sensitive, luminol-based solution that can be used for any blotting applications that utilize horseradish peroxidase (HRP)-conjugates, with minimal background interference.

Components

Item	100mL	500mL
Solution A	50mL	250mL
Solution B	50mL	250mL



Procedure

In order to prevent contamination, do not pour used solution back into the substrate bottle. Use clean gloves and forceps; do not use rusted forceps. Analytes can be applied to membranes as a dot blot or by gel transfer. Blotting conditions should be optimized for each assay system.

1. Preparation of working solution: Mix an appropriate amount of solution A and solution B in equal volume, and store at room temperature for later use. Working solution should be prepared before testing.
2. After incubation with Western secondary antibody and washing for several times, remove the membrane with WB special forceps, slightly absorb excess liquid with absorbent paper (do not touch the protein surface of the membrane), and then place it on a clean plastic wrap.
3. According to the size of the membrane, add 1 mL of working solution to the membrane per 10 square centimeters, make sure that the working solution is evenly covered on the membrane, and leave for 1-2 minutes..
4. Discard the working solution, and slightly absorb the excess liquid with a absorbent paper. The membrane is placed between two pieces of plastic wrap and then tested by a tablet compression or chemiluminescence imager.
5. Tablet compression test: fix the film in the tablet clip. Pressing the tablet in the darkroom for 1 minute, immediately develop and fix the film, and adjust the pressing time according to the results. Or directly press the tablet for 30 seconds, 1, 3, 5 minutes, and then develop and fix the observation results together.
6. Chemiluminescence imager test: place the film in the chemiluminescence imager, refer to the instrument manual for testing.

Precautions and Disclaimer

1. The spearhead must be replaced in the process of absorbing liquid A and liquid B. The mutual contamination of liquid A and liquid B will lead to gradual failure of liquid A or liquid B, affecting the subsequent use effect.
2. After using the solution, please close the bottle cap to prevent failure. Liquid B, in particular, contains oxidant, which is easy to be reduced and ineffective.
3. Both solution A and solution B are harmful to human body. Please be careful when handling and pay attention to effective protection to avoid direct contact with human body or inhalation.
4. This product is for R&D use only, not for drug, household, or other uses.