



ECL Efficient Light Chemiluminescence Kit

E1491293

Storage: 2-8°C. Store in the dark.

Introduction:

ECL Universal Chemiluminescence Kit (Femto-grade) is a non-radioactive chemiluminescence system designed for detecting the activity of horseradish peroxidase (HRP) conjugated to proteins bound on PVDF or NC membranes. This product includes an enhanced luminol substrate and a stable peroxide solution, enabling the detection of trace amounts of protein as low as the femto-gram level. With a broad detection range and high sensitivity, it is suitable for most conventional Western Blot chemiluminescence detection applications.

Component List:

E1491293	Component	100 mL	500 mL	Storage
E1491293A	E-ECL Substrate	50 mL	250 mL	2-8°C. Store in the dark.
E1491293B	E-ECL Oxidant	50 mL	250 mL	2-8°C. Store in the dark.

Features:

1. High Sensitivity –Capable of rapidly detecting proteins at femto-gram levels, outperforming other high-end products in the same category.
2. High Cost-Effectiveness – Offers exceptional value compared to other chemiluminescence substrates of similar grade.

Instructions for Use:

1. Remove the transfer membrane from the washing buffer and drain excess liquid, ensuring the membrane remains moist.
2. Mix E-ECL Substrate and E-ECL Oxidant in equal volumes to prepare the chemiluminescence working solution (approximately 0.1 mL per square centimeter of membrane).
3. Evenly apply the chemiluminescence working solution onto the membrane and incubate for 1–2 minutes. For highly abundant target proteins, avoid letting the working solution remain stationary. Instead, place the membrane on a shaker for 1–2 minutes to prevent localized depletion of reactants, which may affect the linear range of detection signals.
4. Remove the membrane and drain excess working solution. Wrap the membrane in a transparent protective cover.
5. X-ray Film Exposure: In a darkroom, expose the membrane to X-ray film. Exposure times

may range from a few seconds to several minutes. Develop the film and, if necessary, adjust the exposure time for a second exposure based on the initial results.

CCD Imager: The membrane can be directly imaged without a protective cover. Follow the instrument's instructions for imaging.

6. The membrane can be stripped and reused for multiple hybridizations.

Precautions:

1. Avoid strong light exposure to E-ECL Substrate and the working solution, as it may reduce sensitivity.
2. Due to the high sensitivity of the ECL solution, avoid using excessively high antibody concentrations to prevent increased background signals.
3. Sodium azide (NaN_3) inhibits HRP activity. Avoid using NaN_3 for the storage or recycling of secondary antibodies.
4. For safety and health reasons, wear lab coats and disposable gloves during operation.
5. This product is intended for research use only.