

Product: **FastGene® Western ECL Kit**

Cat. No. : FG-CH01 (50 mL per solution); FG-CH01s (2mL per solution)

Category: *Chemiluminescent substrate*

Description:

The FastGene® Western ECL Kit is an enhanced chemiluminescent substrate based on luminol. It is used to detect horseradish peroxidase (HRP) – conjugated secondary antibodies. The high femtogram or low picogram detection of antigen is enabled by FastGene® Western ECL Kit brilliant sensitivity and long signal duration. This long chemiluminescent signal duration makes it possible to detect signals on both digital and film-based imaging systems without any loss in signal intensity. Appropriate primary and secondary antibody dilutions are suggested for attaining optimal signal intensity and duration.

Quick Notes

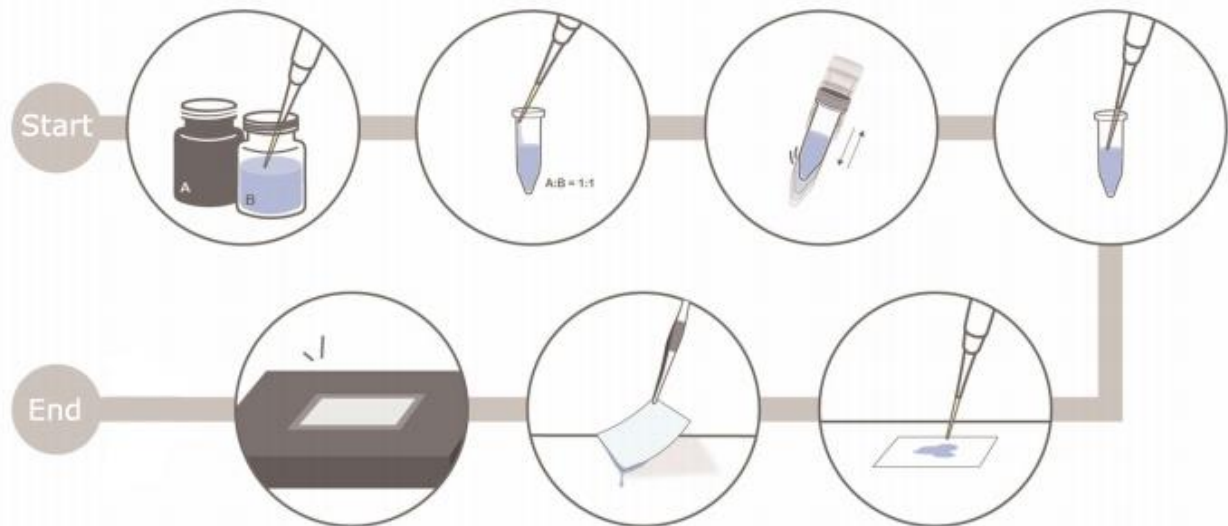
- **No optimization required.** You can switch from other brands to FastGene® Western ECL Kit easily.
- **High degree of sensitivity and enhanced chemiluminescence duration.** FastGene® Western ECL Kit detects low picogram or high femtogram protein amount on the same immunoblot after a single exposure.
- **Optimized for use with PVDF and nitrocellulose membranes.**
- **Compatible with Western Blotting Markers.**
- **Optimized for film- and CCD-based imaging.**

Storage:

Store at 4°C for 1 year.

Protocol:

- Keep membrane moist in wash buffer while preparing the substrate mixture. Please ensure the membrane does not dry out during the subsequent steps.
- Mix Luminol solution and Peroxide Solution in a 1:1 ratio, and thoroughly agitate the chemiluminescent substrate solution well for preparing the 0.1 ml of solution / cm² of membrane.
 - For a mini-sized membrane (7 x 8.5 cm), 4 ml of solution is sufficient.
 - For a midi-sized membrane (8.5 x 13.5 cm), 10 ml of solution is sufficient.
- Place the membrane with the protein side up on a clear and level surface or in a clean container.
- Remove the membrane from the chemiluminescent substrate solution and drain off excessive solution.
- Place the membrane in a plastic sheet protector or in plastic wrap to prevent the membrane from drying.
- Image the membrane with a digital imager or by exposing to the X-ray film.



Troubleshooting:

Problem	Cause	Solution
High Background	Overconcentrated primary or secondary antibody	*Decrease the antibody concentration. *Perform a dot blot to optimize the concentration.
	Insufficient wash	*Increase the frequency or duration.
	Incomplete blocking	*Decrease the antibody concentration. *Perform a dot blot to optimize the concentration.
No Reaction or Weak Signal	Insufficient antigen binding	*Decrease antibody concentration. *Optimize blocking reagents to achieve a balance between sensitivity and specificity.
	Poor antibody binding to the antigen	*Optimize detergent used for antibodies. *Increase the antibody incubation time.
No Reaction or Weak Signal	Proteins washed from the membrane during assay	*Reduce the number or intensity of wash
	Insufficient reagent volume	*Apply additional volumes of antibody blocking reagent, or wash solution.

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