Product	**FastGene® Western ECL Kit**
Catalog #	FG-CH01 (50 mL per solution); FG-CH01s (2mL per solution)
Category	Chemiluminescent substrate

Desciption

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

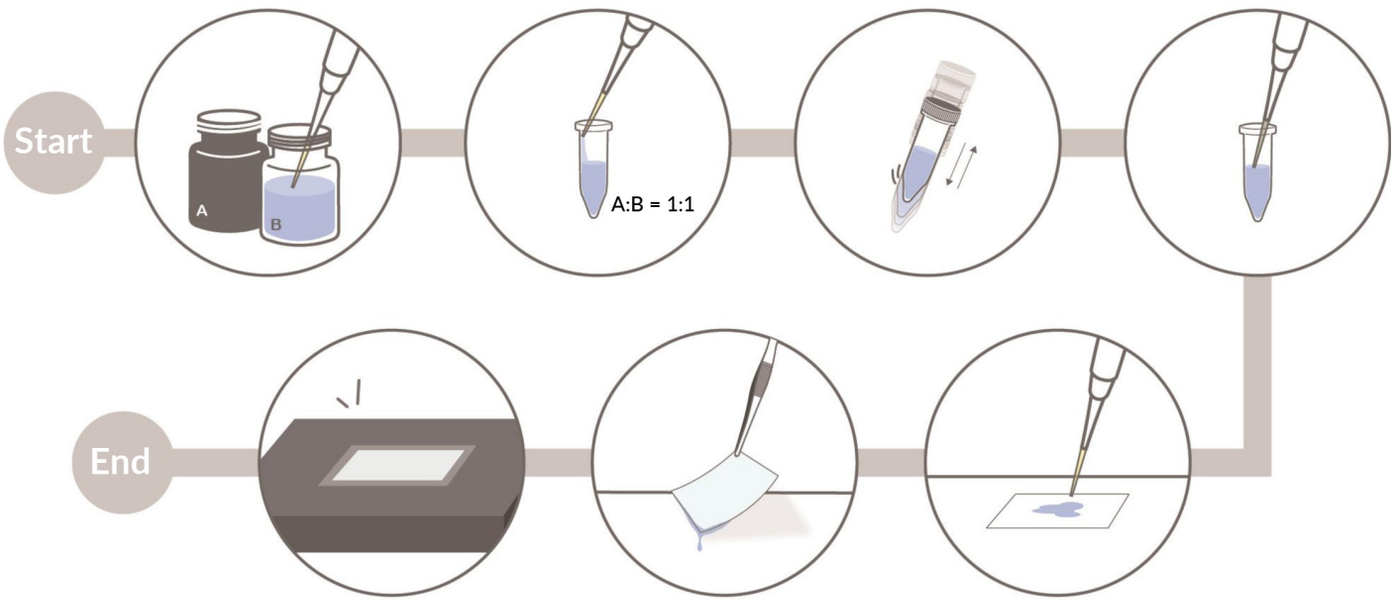
Storage

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.
- Carefully drip the ECL solution mixture onto the membrane so that it is completely covered by the solution.
- Incubate the ECL solution on the membrane for 10 to 30 seconds. For weakly expressed proteins, the time can be increased to 1-5 minutes to obtain a stronger signal.
- Remove the membrane from the chemiluminescent substrate solution and drain off the 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.

+49 2421 55496 0
+49 2421 55496 11
info@nippongenetics.eu
www.nippongenetics.eu



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.

+49 2421 55496 0
+49 2421 55496 11
info@nippongenetics.eu
www.nippongenetics.eu
NIPPON Genetics EUROPE
INNOVATION FOR YOU