

DESCRIPTION

Enhanced chemiluminescence (ECL) reagents are used with horseradish peroxidase (HRP)-conjugated secondary antibodies to detect protein abundance during Western blotting. HRP catalyzes luminol oxidation in the presence of hydrogen peroxide, producing light that can be detected by X-ray film and digital imagers.

Our PiQ™ and FeQ™ ECL reagents are formulated with proprietary enhancers that greatly increase the intensity and duration of emitted light. These ECL reagents are ultrasensitive and suitable to detect proteins at picogram and femtogram levels. When using PiQ™ and FeQ™ ECL reagents, the recommended dilutions for primary and secondary antibodies are 1:5000-1:10,000 and 1:50,000-100,000, respectively. Compared to other commonly used ECL reagents, these exhibit superior performance by generating extremely intense signal with low background and require ten-fold less primary and secondary antibodies.

KEY FEATURES

- **Ultrasensitive:** Can detect picogram and femtogram levels of protein.
- **Superior:** Formulated to increase intensity and duration of emitted light.
- **Economic:** Save money by using 5-10 fold less primary and secondary antibodies.
- **High-Quality:** Produces intense signal with low background noise.

PRODUCTS

Cat. #	Description	Volume	Price
636S	PiQ™ ECL	50 mL	\$69
636M	PiQ™ ECL	100 mL	\$119
636L	PiQ™ ECL	200 mL	\$199
226S	FeQ™ ECL	50 mL	\$119
226M	FeQ™ ECL	100 mL	\$199
226L	FeQ™ ECL	150 mL	\$339

STORAGE

Stable at 4°C for at least 1 year.

PROTOCOL

1. Allow the ECL reagents to equilibrate to room temperature approximately 30 min before use.
2. Wash the membrane thoroughly to reduce non-specific signals.
3. Mix Reagent A and B at a 1:1 ratio. Vortex to mix.
4. Immerse the membrane in the mixed solution for 2–3 min.
5. Drain the excess solution using a paper towel and wrap the membrane in plastic wrap or a clear plastic folder.
6. Detect the chemiluminescence using X-ray film or a digital imager.

VALIDATION

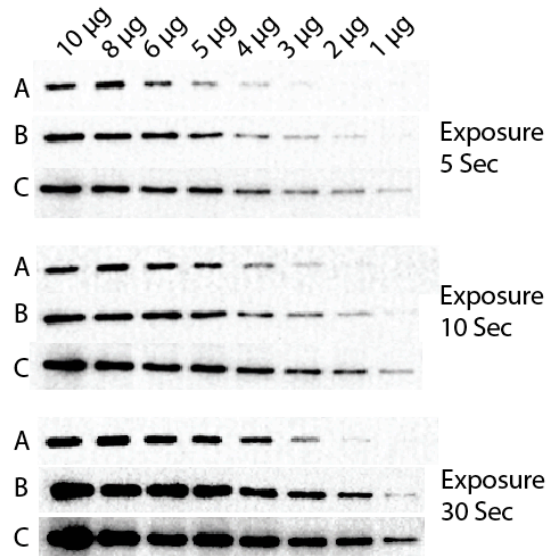


Figure 1. HEK293 cell lysates were separated by SDS-PAGE and immunoblotted with our anti-ACTB antibody (Cat. #1171). The amount of total cell lysates (μg) are indicated on top of the image. An ECL reagent from a commercial vendor (A), PiQ™ ECL (B), and FeQ™ ECL (C) were used to detect the protein. The exposure time is indicated on the right.

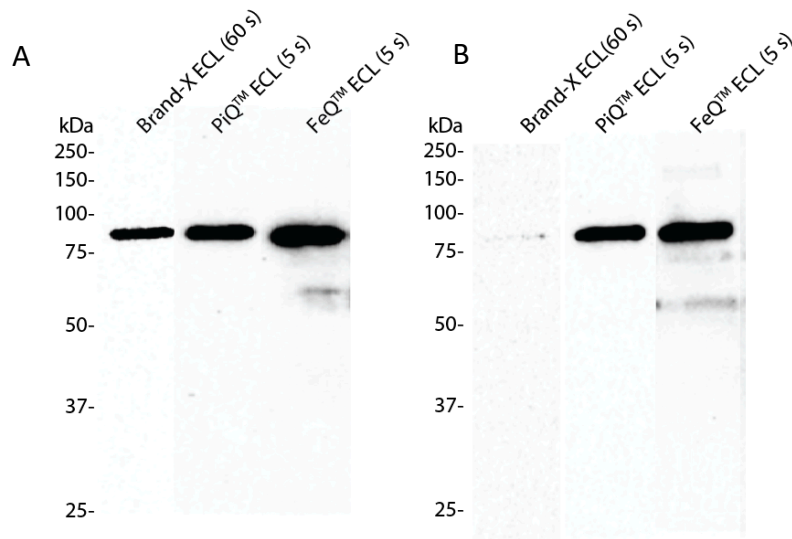


Figure 2. 30 μg of lysates from HeLa (human, **A**) and DF-1 (chicken, **B**) cells were separated by SDS-PAGE and immunoblotted using our anti-RRM1 antibody (90 kDa, Cat. #9651). Comparison of PiQ™ and FeQ™ ECL reagents to an ECL from vendor X showed that our products outperformed the brand of vendor X.