ENHANCED CHEMILUMINESCENCE (ECL) REAGENTS

2270 KRAFT DRIVE, SUITE 1000
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REV.11/10/19

PRODUCT INFORMATION

Catalog	Description	Volume
636S	PiQ™ ECL	50 mL
636M	PiQ™ ECL	100 mL
636L	PiQ™ ECL	200 mL
226S	FeQ™ ECL	50 mL
226M	FeQ™ ECL	100 mL
226L	FeQ™ ECL	200 mL

STORAGE

Stable at 4°C for at least 1 year

DESCRIPTION

Enhanced chemiluminescence (ECL) reagents are used with horseradish peroxidase (HRP)-conjugated secondary antibodies to detect protein abundance in Western blot. 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. Our 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, ours exhibit superior performance by generating extremely intense signal with low background and require ten-fold less primary and secondary antibodies.

DIRECTIONS

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.

QUALITY TESTING DATA

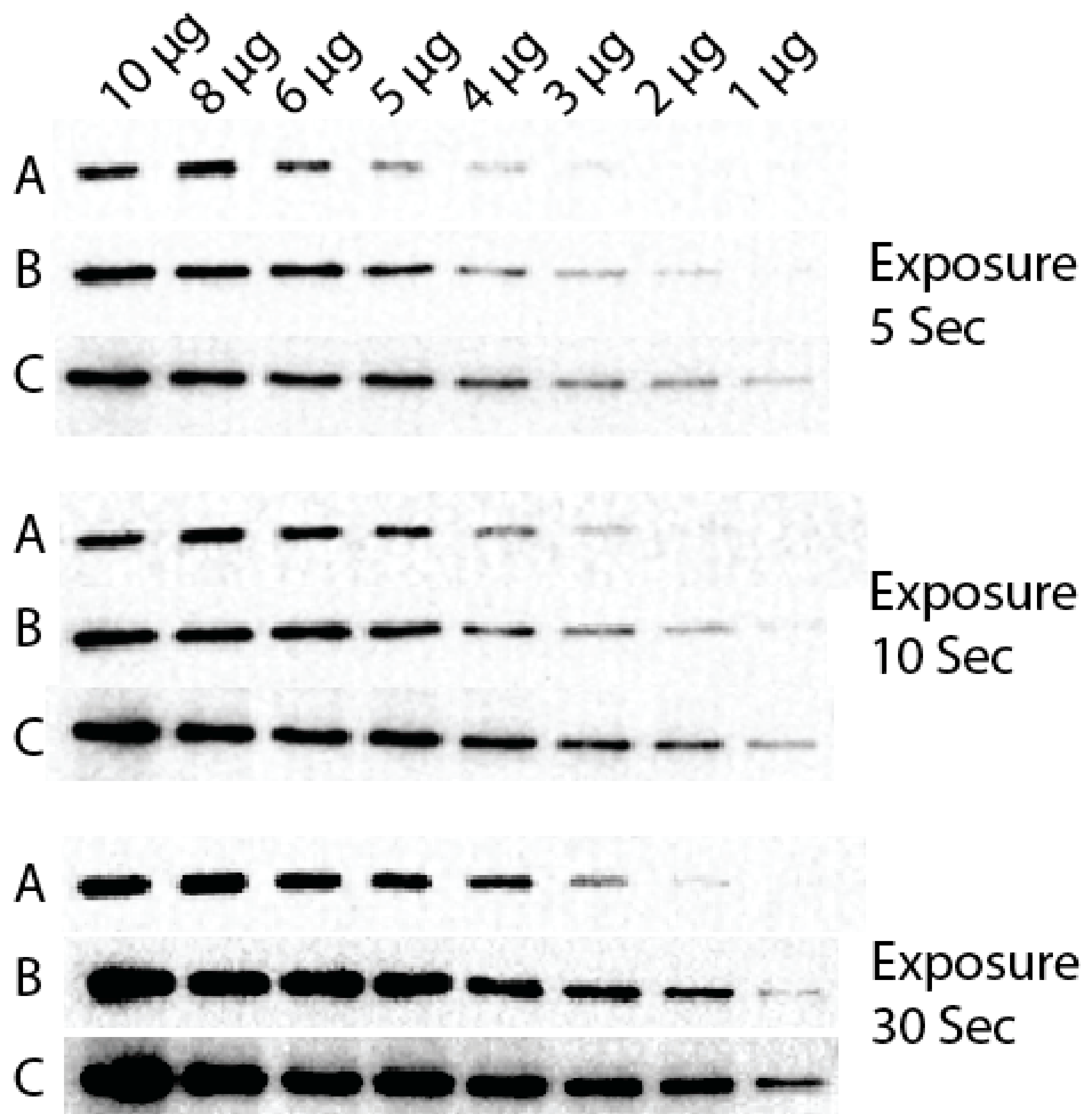

Figure 1. HEK293 cell lysates were separated by SDS-PAGE and immunoblotted with anti-ACTB (β-actin) antibody (Cat#1171). The micrograms of total cell lysates were indicated on top of the graph. Letter A, a widely used ECL from a commercial vendor; B, PiQ™ ECL; and C, FeQ™ ECL. The exposure time was indicated on the right.

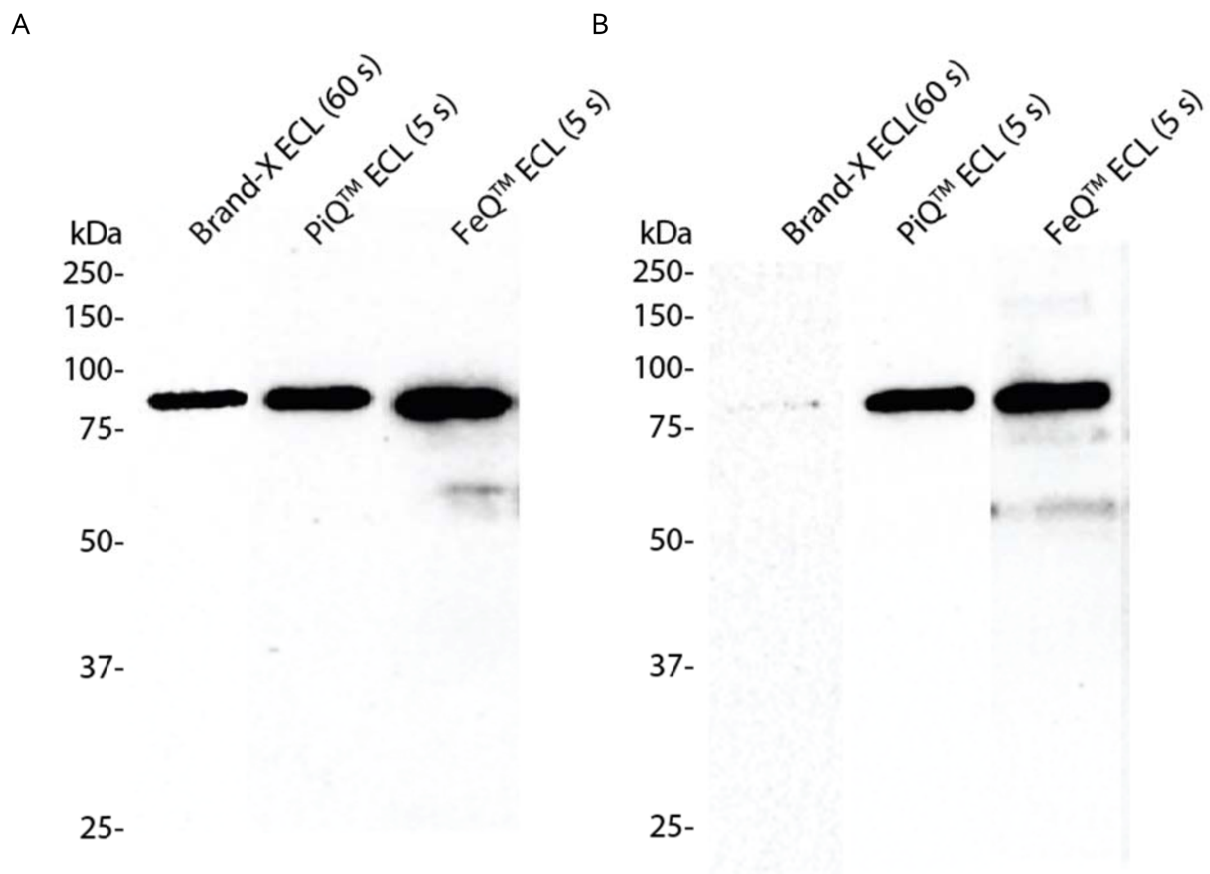

Figure 2. 30 µg of lysates from HeLa (human, **A**) and DF-1 (chicken, **B**) cells were separated by SDS-PAGE and immunoblotted using anti-RRM1antibody (90 kDa, Cat#9651). Comparison of PiQ™ and FeQ™ ECLs to an ECL from vendor X showed that our products outperformed the brand of vendor X. In particular, when it comes to weak band, our ECL products were much more sensitive and powerful than Brand-X.

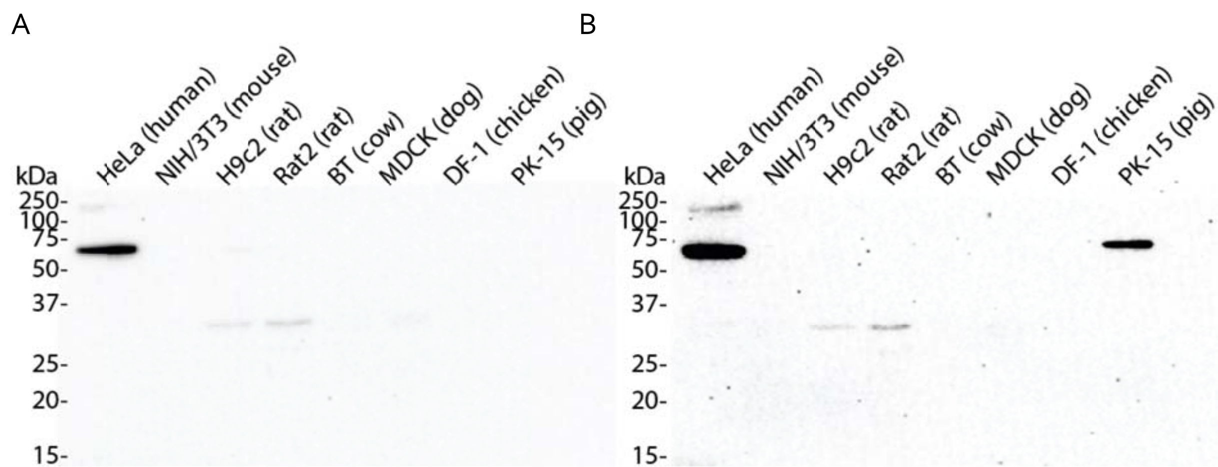

Figure 3. A total of 30 µg of cell lysates from various cell lines were separated by SDS-PAGE and immunoblotted using anti-DLAT antibody (69 kDa, Cat#2417). The same blot was first exposed for 30 seconds (**A**) using an ECL reagent from vendor X for 30 seconds, washed thoroughly with TBST, then exposed for 5 seconds using our FeQ^{TM} ECL (**B**). Note that the existing bands in HeLa cells were greatly enhanced, and the band not detected by the vendor's ECL appeared in the pig cell line using FeQ^{TM} ECL.