# WesternBright<sup>™</sup> ECL

Sensitive HRP substrate for chemiluminescent Western blots imaged using film

WesternBright ECL is a horseradish peroxidase substrate optimized for chemiluminescent Western blots imaged using X-ray film. WesternBright ECL requires as little as ten times less antibody than other substrates, allowing you to conserve precious antibodies and samples. Additionally, the WesternBright ECL signal is long-lasting, allowing multiple exposures to be carried out without substantial signal decay.

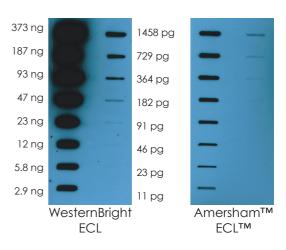


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# Enhanced chemiluminescence, optimized for film imaging

WesternBright ECL is specially formulated to produce a strong signal for sensitive film imaging. WesternBright ECL substrate produces a strong, long-lasting signal after reaction with HRP. Duplicate slot blots containing serial dilutions of transferrin protein were detected using WesternBright ECL or Amersham™ ECL™ (GE Healthcare). Both blots were simultaneously exposed to the same sheet of film for 15 seconds. WesternBright ECL is several times more sensitive than Amersham ECL.



## High sensitivity for detection of low abundance proteins



5.0 µg 2.5 µg 1.25 µg 0.63 µg 0.31 µg 0.16 µg



Amersham™ ECL™



The higher sensitivity of WesternBright ECL is especially important when detecting low abundance proteins. Duplicate Western blots with serial dilutions of HeLa cell lysate were probed for ERK1 and detected using either WesternBright ECL or Amersham ECL HRP substrates. Each blot was exposed to film for 1 minute.



# WesternBright TM ECL

Sensitive HRP substrate for chemiluminescent Western blots imaged using film

## Shorter exposure times

WesternBright ECL produces a strong signal resulting in greater sensitivity with much shorter exposure times. Duplicate blots containing serial dilutions of transferrin protein were detected using WesternBright ECL or Amersham ECL according to the manufacturers' instructions, and the blots were exposed to the same piece of film. More bands can be detected with a 30 second exposure of the WesternBright ECL blot than with a 5 minute exposure of the Amersham ECL blot.

### WesternBright ECL

9.33 ng 4.67 ng 2.33 ng 583 pg 292 pg 146 pg 73 pg 36 pg 36 pg 18 pg 9.1 pg 4.6 pg



30 sec exposure

#### **Amersham ECL**

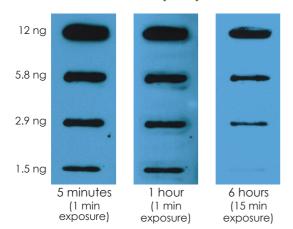


30 sec exposure



5 min exposure

## Signal that lasts, for flexible imaging



**WesternBright ECL produces a long-lasting signal.** A blot detected with WesternBright ECL can be imaged six hours after substrate incubation. There is no need to rush to the darkroom to image a blot.

# Amersham ECL Bridger Bridger

60 min exposure

## Stable signal allows longer exposures

The greater stability of WesternBright ECL allows more signal to be accumulated during long exposures, increasing the ability to detect very low abundance proteins. Duplicate Western blots were probed for ATP1A1 protein and detected using WesternBright ECL or Amersham ECL. In a 10 minute exposure, only 2 bands can be detected with either substrate. With a 60 minute exposure, a band is visible in the 1.25 µg lane of the WesternBright ECL blot, while signal decay results in little difference between a 10 min or 60 minute exposure of the Amersham ECL blot

# WesternBright<sup>™</sup> ECL

### Sensitive HRP substrate for chemiluminescent Western blots imaged using film

WesternBright ECL chemiluminescent HRP substrate is formulated for film detection. Its strong signal allows for greater sensitivity, shorter exposures, and conservation of precious antibodies.

### Features

- Stronger signal than Amersham™ or Pierce™ ECL.
- Detect low pg protein amounts.
- Use up to ten times less antibody.

### Ordering Information

Catalog Number	Product	Size
K-12045-C20	WesternBright™ ECL Western Blotting HRP Substrate trial kit size	20 ml
K-12045-D20	WesternBright™ ECL Western Blotting HRP Substrate (for 2000 cm² membrane)	200 ml
K-12045-D50	WesternBright™ ECL Western Blotting HRP Substrate (for 5000 cm² membrane)	500 ml

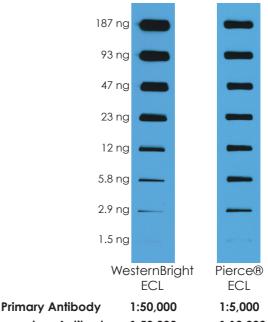
### Related Products

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K-12049-D50	WesternBright™ ECL Spray	500 ml
L-07014-100	LucentBlue™ X-ray film, 8 x 10" sheets	100 sheets
L-08001-010	Low-Fluorescence PVDF Transfer Membrane 7x9 cm	10 sheets
L-08002-010	Nitrocellulose Transfer Membrane 0.45 µm 8x10 cm	10 sheets
L-08003-010	Nitrocellulose Transfer Membrane 0.22 µm 8x10 cm	10 sheets
R-03024-D50	AdvanWash™ 10x washing solution	500 ml
R-05071-500	Goat-anti-mouse HRP conjugated secondary antibody	500 μΙ
R-05072-500	Goat-anti-rabbit HRP conjugated secondary antibody	500 µl

### **Advansta Corporation**

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### Save antibody, save money



**Primary Antibody Secondary Antibody** 1:50,000 1:10,000

WesternBright ECL detects equal amounts of protein with up to ten times less antibody. Duplicate slot blots containing serial dilutions of transferrin were probed with the antibody dilutions shown, and detected with either WesternBright ECL or Pierce ECL (Thermo Scientific) according to the manufacturers' instructions. The blots were imaged simultaneously on the same piece of film. WesternBright ECL produced the same sensitivity with ten times less primary and five times less secondary antibody.



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