

## Product datasheet

# ECL Western Blotting Substrate Kit ab65623

★★★★★ 1 Abreviews 48 References 1 Image

### Overview

**Product name** ECL Western Blotting Substrate Kit

**Product overview** The ECL Western Blotting Substrate is a highly sensitive, nonradioactive, enhanced luminol-based chemiluminescent substrate for easy detection of horseradish peroxidase (HRP) on immunoblots. The ECL Western Blotting Substrate offers superior signal and clear background. Blots can be repeatedly exposed to X-ray film to obtain optimal results or stripped of the immunodetection reagents and re-probed.

Our ECL kits include this kit ab65623 and our high sensitivity ECL substrate kits:

- High Sensitivity [ECL Substrate Kit ab133406](#) to detect 23pg-187ng of protein per band
- Very High Sensitivity [ECL Substrate Kit ab133408](#) to detect 4.6pg-4.7ng of protein per band
- Ultra High Sensitivity [ECL Substrate Kit ab133409](#) to detect 1.2pg-2ng of protein per band

Detection ranges in pg and ng stated above should be used for guidance only as detection range is dependent on the molecular weight of a protein.

**Notes** Reagents provided are sufficient for 400 cm<sup>2</sup> of membrane.

**Tested applications** **Suitable for:** WB

### Properties

**Storage instructions** Store at +4°C. Please refer to protocols.

Components	50 tests	500 tests
Reagent A	1 x 25ml	1 x 250ml
Reagent B	1 x 25ml	1 x 250ml

**Relevance** ECL (enhanced luminol-based chemiluminescent) detection is a sensitive, nonradioactive method for easy detection of horseradish peroxidase (HRP) on western blots.

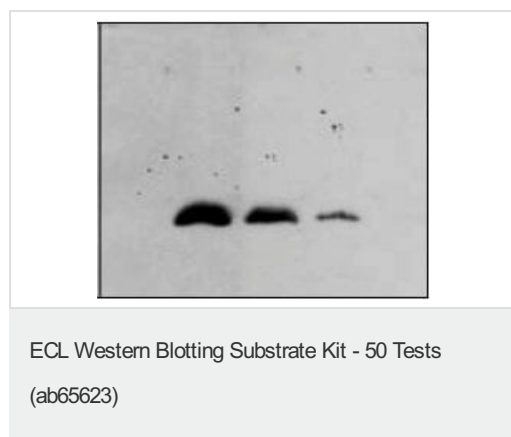
## The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab65623 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent dilution.

## Images



ECL Western Blotting Substrate

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## Product datasheet

# ECL Substrate Kit (High Sensitivity) ab133406

★★★★★ 3 Abreviews 26 References 2 Images

### Overview

**Product name** ECL Substrate Kit (High Sensitivity)

**Product overview** High Sensitivity ECL Substrate Kit ab133406 is designed for the detection of proteins with 23pg-187ng of protein per band. It uses an enhanced chemiluminescent substrate for western blotting that was developed for film imaging and is also compatible with CCD imaging. The high sensitivity ECL substrate produces a strong signal with very low background. Additionally, the ECL signal is long lasting, allowing repeated exposures without fear of losing data.

Our ECL kits include our popular [ECL Substrate Kit ab65623](#) and our high sensitivity ECL substrate kits:

- this kit (High Sensitivity ECL Substrate Kit ab133406) to detect 23pg-187ng of protein per band
- Very High Sensitivity [ECL Substrate Kit ab133408](#) to detect 4.6pg-4.7ng of protein per band
- Ultra High Sensitivity [ECL Substrate Kit ab133409](#) to detect 1.2pg-2ng of protein per band

Detection ranges in pg and ng stated above should be used for guidance only as detection range is dependent on the molecular weight of a protein.

This product was previously called Optiblot ECL Detect Kit (23pg-187ng).

### Notes

- Use:
- 200ml kit for 2000cm<sup>2</sup> membrane
  - 500ml kit for 5000cm<sup>2</sup> membrane

The primary antibody can often be diluted 5 to 10 fold more than usual when using this ECL substrate. A typical primary antibody dilution range using the substrate is 1/5000 - 1/20,000, with a typical secondary antibody dilution range of 1/20,000 - 1/100,000. Some optimisation may be required.

**Tested applications** **Suitable for:** WB

### Properties

**Storage instructions** Store at +4°C. Please refer to protocols.

Components	200 ml	20 ml	500 ml
Luminol/Enhancer Solution	1 x 100ml	1 x 10ml	1 x 250ml
Peroxide Chemiluminescent Detection Reagent	1 x 100ml	1 x 10ml	1 x 250ml

## Applications

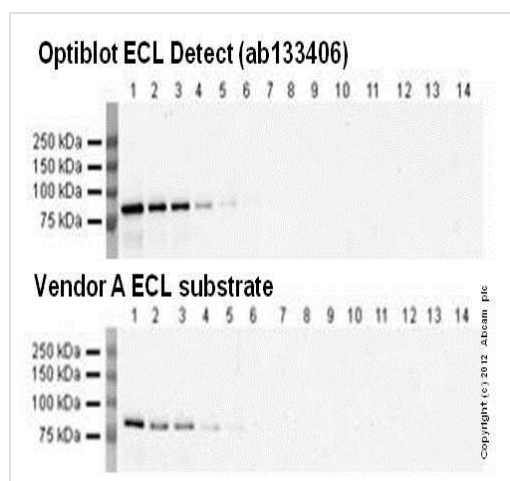
### The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab133406 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration.

## Images



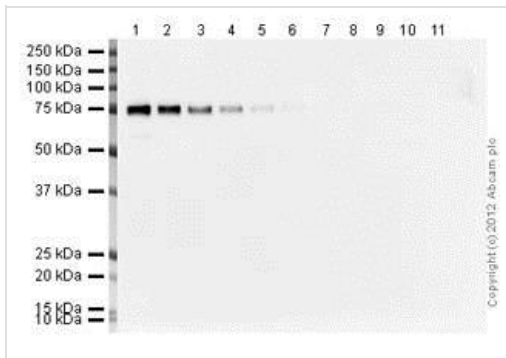
Anti-Transferrin antibody ([ab1223](#)) at **1/25000** dilution. Lanes 1-14 Transferrin protein ([ab91435](#)), Loading dilution (Lanes 1-8): 12.5, 6.2, 3.1, 1.6, 0.8, 0.3, 0.19µg protein.

### Secondary

HRP conjugated polyclonal to Rabbit IgG ([ab97080](#)) at **1/50000** developed using Optiblot ECL Detect and Vendor A ECL substrate.

**Exposure time:** 20 seconds

Western blot comparison 1/25000 anti-Transferrin primary antibody, 1/50000 secondary antibody, 20 second exposure



Western Blot 1/25000 primary antibody, 1/5000 secondary antibody, 20 second exposure

Each lane contains the following amount of COX2 recombinant protein ([ab58868](#)): 1) 100ng 2) 50ng 3) 25ng 4) 12.5ng 5) 6.25ng 6) 3.13ng 7) 1.56ng 8) 780pg 9) 390pg 10) 195pg 11) 98pg. The blot was probed with rabbit anti-COX2 antibody ([ab15191](#)) at 1/25000 dilution and with a rabbit secondary ([ab97080](#)) at 1/5000 dilution. The blot was developed with 20ml of Optiblot ECL Detect.

**Exposure time:** 20 seconds

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## Product datasheet

# ECL Substrate Kit (Very High Sensitivity) ab133408

1 References 2 Images

### Overview

**Product name** ECL Substrate Kit (Very High Sensitivity)

**Product overview** Very High Sensitivity ECL Substrate Kit () ab133408 uses a new horseradish peroxidase (HRP) substrate specially developed to take advantage of the large linear dynamic range provided by CCD imaging. It is designed for the detection of proteins from 4.6pg to 4.7ng of protein per band.

ECL Substrate Kit ab133408 produces a strong, extremely long-lived signal, which, combined with very low background levels, allows for long exposure times enabling the detection of low-abundance proteins. Additionally, the signal from the ECL substrate is linear with respect to protein amount over a broad range of concentrations, displaying no substrate depletion at high protein loads, allowing the user to take full advantage of the linear range of the CCD detection method.

The ECL substrate is also compatible with X-ray film detection, though the limited dynamic range of film will make resulting data less quantitative.

Our ECL kits include our popular [ECL Substrate Kit ab65623](#) and our high sensitivity ECL substrate kits:

- High Sensitivity [ECL Substrate Kit ab133406](#) to detect 23pg-187ng of protein per band
- this kit (Very High Sensitivity ECL Substrate Kit ab133408) to detect 4.6pg-4.7ng of protein per band
- Ultra High Sensitivity [ECL Substrate Kit ab133409](#) to detect 1.2pg-2ng of protein per band

Detection ranges in pg and ng stated above should be used for guidance only as detection range is dependent on the molecular weight of a protein.

This product was previously called Optiblot ECL Max Detect Kit (4.6pg-4.7ng).

### Notes

- Use:
- 100ml kit for 1000cm<sup>2</sup> membrane
  - 200ml kit for 2000cm<sup>2</sup> membrane

The primary antibody can often be diluted 5 to 10 fold more than usual when using this ECL substrate. A typical primary antibody dilution range using the substrate is 1/5000 - 1/20,000, with a typical secondary antibody dilution range of 1/20,000 - 1/100,000. Some optimisation may be required.

Tested applications

Suitable for: WB

## Properties

### Storage instructions

Store at +4°C. Please refer to protocols.

Components	200 ml	100 ml	20 ml
Luminol/enhancer solution	1 x 100ml	1 x 50ml	1 x 10ml
Peroxide Chemiluminescent Detection Reagent	1 x 100ml	1 x 50ml	1 x 10ml

## Applications

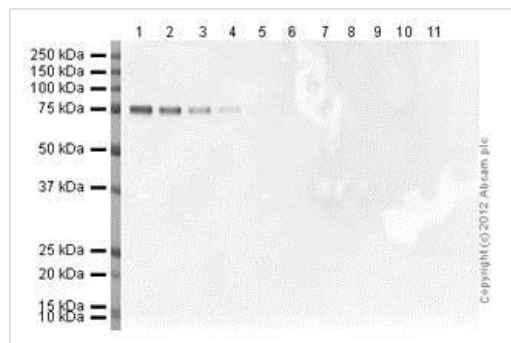
### The Abpromise guarantee

Our [Abpromise guarantee](#) covers the use of ab133408 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration.

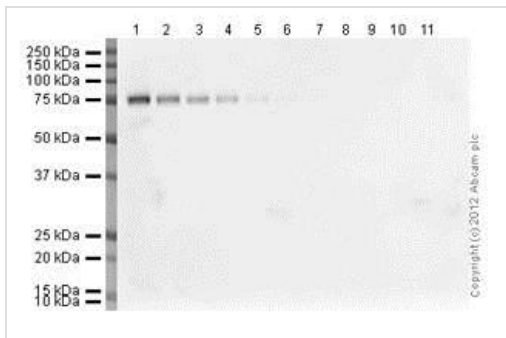
## Images



Western Blot 1/50000 primary antibody, 1/5000 secondary antibody, 10 second exposure

Each lane contains the following amount of COX2 recombinant protein ([ab58868](#)): 1) 100ng 2) 50ng 3) 25ng 4) 12.5ng 5) 6.25ng 6) 3.13ng 7) 1.56ng 8) 780pg 9) 390pg 10) 195pg 11) 98pg. The blot was probed with rabbit anti-COX2 antibody ([ab15191](#)) at 1/50000 dilution and with a rabbit secondary ([ab97080](#)) at 1/5000 dilution. The blot was developed with 20ml of Optiblot ECL Max Detect.

**Exposure time:** 10 seconds



Western Blot 1/25000 primary antibody, 1/5000 secondary antibody, 10 second exposure

Each lane contains the following amount of COX2 recombinant protein ([ab58868](#)): 1) 100ng 2) 50ng 3) 25ng 4) 12.5ng 5) 6.25ng 6) 3.13ng 7) 1.56ng 8) 780pg 9) 390pg 10) 195pg 11) 98pg. The blot was probed with rabbit anti-COX2 antibody ([ab15191](#)) at 1/25000 dilution and with a rabbit secondary ([ab97080](#)) at 1/5000 dilution. The blot was developed with 20ml of Optiblot ECL Max Detect.

**Exposure time:** 10 seconds

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## Product datasheet

# ECL Substrate Kit (Ultra High Sensitivity) ab133409

★★★★★ 1 Abreviews 4 References 2 Images

### Overview

**Product name** ECL Substrate Kit (Ultra High Sensitivity)

**Product overview** Ultra High Sensitivity ECL Substrate Kit ab133409 is a horseradish peroxidase (HRP) substrate specially developed for Western blotting detection of very low abundance proteins with 1.2pg-2ng of protein per band. ECL Substrate Kit ab133409 produces a strong, long-lived signal, which, combined with very low background levels, allows for long exposure times enabling the detection of low-abundance proteins. Additionally, the signal from ECL Substrate Kit ab133409 is linear with respect to protein amount over a broad range of concentrations, allowing the user to accurately quantify protein bands.

ECL Substrate Kit ab133409 is most suitable for detection of low-abundance proteins or in situations when amounts of available primary antibodies are very limited and high dilution factors are desired, or when primary antibodies have relatively low binding constants.

This ECL Substrate Kit also compatible with X-ray film detection, though the limited dynamic range of film will make resulting data less quantitative. The ECL substrate also produces a chemifluorescent signal that can be detected with a fluorescence imaging system using appropriate excitation and emission settings.

Our ECL kits include our popular [ECL Substrate Kit ab65623](#) and our high sensitivity ECL substrate kits:

- High Sensitivity [ECL Substrate Kit ab133406](#) to detect 23pg-187ng of protein per band
- Very High Sensitivity [ECL Substrate Kit ab133408](#) to detect 4.6pg-4.7ng of protein per band
- this kit (Ultra High Sensitivity ECL Substrate Kit ab133409) to detect 1.2pg-2ng of protein per band

Detection ranges in pg and ng stated above should be used for guidance only as detection range is dependent on the molecular weight of a protein.

This product was previously called Optiblot ECL Ultra Detect Kit (1.2pg-2ng).

### Notes

- Use:
- 100ml kit for 1000cm<sup>2</sup> membrane
  - 200ml kit for 2000cm<sup>2</sup> membrane

The primary antibody can often be diluted 5 to 10 fold more than usual when using this ECL substrate. A typical primary antibody dilution range using the substrate is 1/5000 - 1/20,000, with

a typical secondary antibody dilution range of 1/20,000 - 1/100,000. Some optimisation may be required.

## Tested applications

**Suitable for:** WB

## Properties

### Storage instructions

Store at +4°C. Please refer to protocols.

Components	200 ml	100 ml	20 ml
Luminol/enhancer solution	1 x 100ml	1 x 50ml	1 x 10ml
Peroxide Chemiluminescent Detection Reagent	1 x 100ml	1 x 50ml	1 x 10ml

## Applications

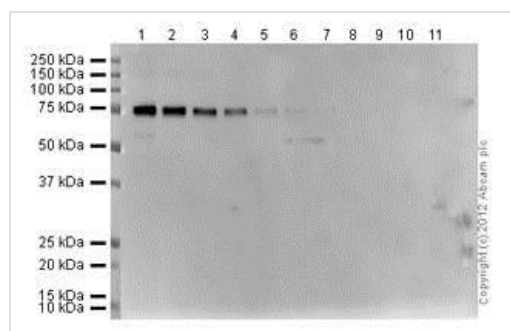
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Application	Abreviews	Notes
WB		Use at an assay dependent concentration.

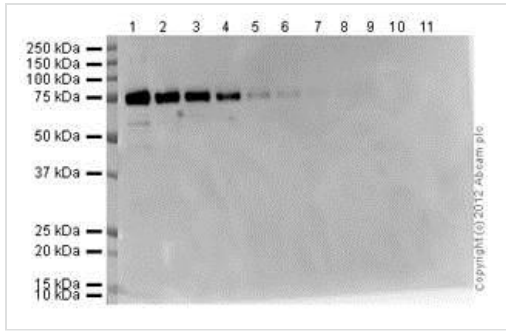
## Images



Western Blot 1/50000 primary antibody, 1/5000 secondary antibody, 10 second exposure

Each lane contains the following amount of COX2 recombinant protein ([ab58868](#)): 1) 100ng 2) 50ng 3) 25ng 4) 12.5ng 5) 6.25ng 6) 3.13ng 7) 1.56ng 8) 780pg 9) 390pg 10) 195pg 11) 98pg. The blot was probed with rabbit anti-COX2 antibody ([ab15191](#)) at 1/50000 dilution and with a rabbit secondary ([ab97080](#)) at 1/5000 dilution. The blot was developed with 20ml of Optiblot ECL Ultra Detect.

**Exposure time:** 10 seconds



Western Blot 1/25000 primary antibody, 1/5000 secondary antibody, 10 second exposure

Each lane contains the following amount of COX2 recombinant protein ([ab58868](#)): 1) 100ng 2) 50ng 3) 25ng 4) 12.5ng 5) 6.25ng 6) 3.13ng 7) 1.56ng 8) 780pg 9) 390pg 10) 195pg 11) 98pg. The blot was probed with rabbit anti-COX2 antibody ([ab15191](#)) at 1/25000 dilution and with a rabbit secondary ([ab97080](#)) at 1/5000 dilution. The blot was developed with 20ml of Optiblot ECL Ultra Detect.

**Exposure time:** 10 seconds

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