

# ECL Substrate Kit (Very High Sensitivity) ab133408

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## Overview

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**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

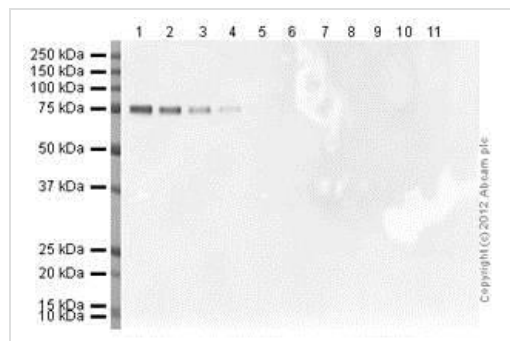
### The Abpromise guarantee

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.

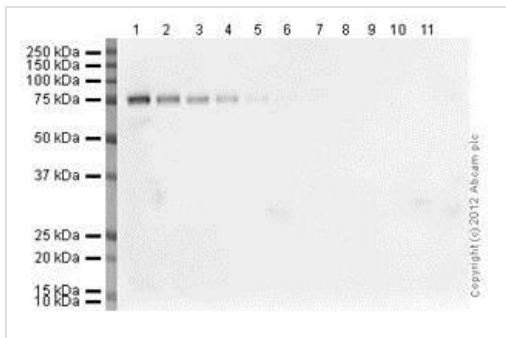
## Images



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

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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