

# Product Datasheet

## LumiBlue (TM) ECL Extra ECLA0250

Unit Size: 250 ml

Store at 4°C.

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**ECLA0250****LumiBlue (TM) ECL Extra****Product Information**

|                      |  |
|----------------------|--|
| <b>Unit Size</b>     | 250 ml   |
| <b>Concentration</b> | Please see the protocols for proper use of this product. If no protocol is available, contact technical services for assistance. |
| <b>Storage</b>       | Store at 4°C.  |

**Product Description**

|                    |  |
|--------------------|--|
| <b>Description</b> | <p><b>LumiBlue™ ECL Extra Solution for Western Blotting</b></p> <p>LumiBlue™ ECL Extra is a solution with a high level of signal intensity and is effective for qualitative and quantitative detection across a wide range of protein concentrations. The solution is sensitive enough to detect 500 fg of protein per band and has a signal duration of up to 12 hours. The working solution is stable for up to three days after activation, allowing convenient experiments spanning multiple days and minimising waste.</p> <p>LumiBlue™ ECL Extra is at least 20 times more intense than standard ECL based on phenolic enhancers, allowing lower antibody concentrations and more blots per batch of antibody while still retaining the same sensitivity.</p> <p><b>Benefits of LumiBlue™ ECL Extra Include:</b></p> <p>Linear response – Novel acylation catalyst provide stable signal over a wide range of protein concentrations<br/> High sensitivity – Detect protein levels as low as 500 fg per band with next generation enhancers<br/> Long lasting signal – Perform multiple exposures with less signal loss<br/> Low background – Optimized formulation for lower backgrounds<br/> Bright bands – Equal or better brightness compared to other ECL solutions<br/> Standard protocols – Direct replacement of other ECL solutions with no protocol reoptimization or changes<br/> Long shelf life – One year shelf life at 4°C, convenient for infrequent Western blotters</p> <p><b>Unique Technology</b></p> <p>ECL kits are based on the enzymatic oxidation of luminol with peroxide, which produces light, usually through horseradish peroxidase (HRP). This method is employed by most traditional ECL kits. However, LumiBlue™ improves upon standard ECL kits by using a patented next generation electron mediator coupled with a novel acylation catalyst to improve performance (called enhancers).</p> <p>The combination of these unique modifications to the ECL process increases reaction efficiency resulting in increased light intensity and less signal decay. Different LumiBlue™ kits are extensively optimized for specific antibody dilutions and protein levels giving higher intensity, longer signal stability and wider linearity over traditional ECL kits. This allows for more flexible and cost effective experimental design.</p> <p><b>Linear Response</b></p> <p>LumiBlue™ ECL solutions are enhanced by a novel acylation catalyst, resulting in a more linear response to HRP levels than conventional ECL solutions. This increases the range of antibody concentrations at which reliable measurement</p> |
|--------------------|--|



can occur. When appropriate antibodies are used protein levels as low as 50 fg ( $5 \times 10^{-14}$ g) per band can be detected with LumiBlue™ ECL Extreme.

### Three Day Working Solution

LumiBlue™ ECL solutions are activated by mixing the provided solutions in a 1:1 ratio. This allows smaller volumes to be prepared with LumiBlue™ than with other solutions that require asymmetric ratios such as 40:1. Convenient volumes can be prepared quickly and easily. Once mixed, the ECL Extra working solution is stable for up to three days, permitting larger batches to be made and used for a number of experiments across multiple days, saving time and ensuring that exactly the same solution is used for each blot.

|                       |   |
|-----------------------|---|
| <b>Kit Components</b> | Solution A - Luminol/enhancer solution (amber bottle), Solution B - Peroxide solution (white bottle)  |
| <b>Notes</b>          | <p>This product is manufactured by Abcam and distributed by Novus Biologicals.</p> <p>This product is for research use only and is not approved for use in humans or in clinical diagnosis. This product is guaranteed for 1 year from date of receipt and this statement overrides any mentioned guarantee period on the limitations section of this products datasheet. Please contact <a href="mailto:technical@novusbio.com">technical@novusbio.com</a> with questions.</p> |

### Product Application Details

|                              |              |
|------------------------------|--------------|
| <b>Applications</b>          | Western Blot |
| <b>Recommended Dilutions</b> | Western Blot |





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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Support products are guaranteed for 6 months from date of receipt.

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