

# Product Datasheet

## LumiBlue (TM) ECL Extended ECLD0100

Unit Size: 100 ml

Store at 4°C.

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**ECLD0100****LumiBlue (TM) ECL Extended**

<b>Product Information</b>	
<b>Unit Size</b>	100 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.
<b>Product Description</b>	
<b>Description</b>	<p><b>LumiBlue™ ECL Extended Solutions for Western Blotting</b></p> <p>LumiBlue™ ECL Extended is a solution with a very high level of signal intensity and is most effective for important blots with low protein levels and dilute antibodies. The solution is sensitive enough to detect approximately 150 fg of protein per band and has a signal duration of up to 18 hours to allow multiple rounds of imaging with more flexible experimental design. The working solution is stable for up to three days after activation, allowing convenient experiments spanning multiple days and minimizing waste. LumiBlue™ ECL Extended is optimized for dilute antibody concentrations and sensitive detection of low abundance protein resulting in sensitive blots using less antibody.</p> <p><b>Benefits of LumiBlue™ ECL Extended Include:</b></p> <p>Linear response – Novel acylation catalyst provide stable signal over a wide range of protein concentrations  High sensitivity – Detect protein levels as low as 150fg per band with next generation enhancers  Stable solution – Working solutions stable for up to three days  Long lasting signal – Perform multiple exposures with less signal loss  Low background – Optimized formulation for lower backgrounds  Wide detection range – Five different ECL solutions, suitable for most protein and antibody concentrations  Bright bands – Equal or better brightness compared to other ECL solutions  Standard protocols – Direct replacement of other ECL solutions with no protocol reoptimization or changes  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</p>

increases the range of antibody concentrations at which reliable measurement 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.

### Kit Components

Solution A - Luminol/enhancer solution (amber bottle), Solution B - Peroxide solution (white bottle)

### Notes

This product is manufactured by Abcam and distributed by Novus Biologicals.

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 [technical@novusbio.com](mailto:technical@novusbio.com) with questions.

### Product Application Details

#### Applications

Western Blot

#### Recommended Dilutions

Western Blot





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### **Limitations**

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