

# Lumigen ECL Plus

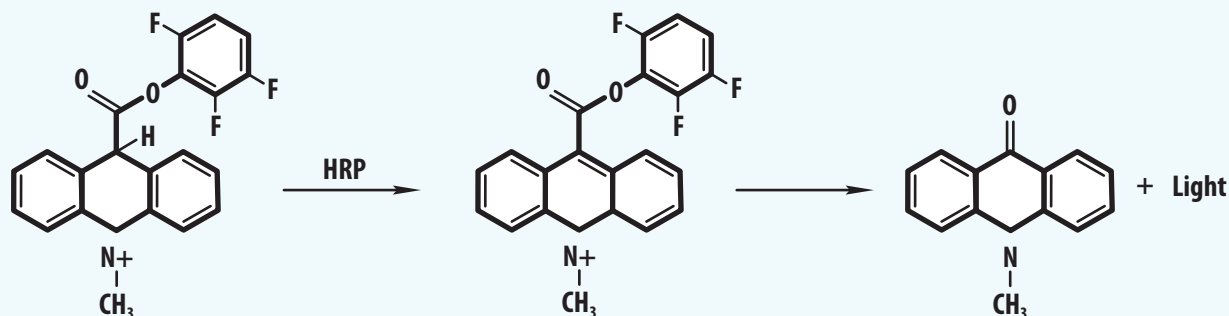
## Western Blotting HRP Substrate

Lumigen ECL Plus (PS-3) is a novel acridan-based chemiluminescent and chemifluorescent substrate for sensitive detection of Western blotted proteins. Lumigen ECL Plus utilizes a unique technology for the chemiluminescent detection of HRP conjugates. The process, which provides superior sensitivity and ease of use,

involves the enzymatic generation of acridinium esters. Reaction of the acridan substrate with an HRP label generates thousands of acridinium ester intermediates per second which react with peroxide at alkaline pH to produce sustained high intensity chemiluminescence.

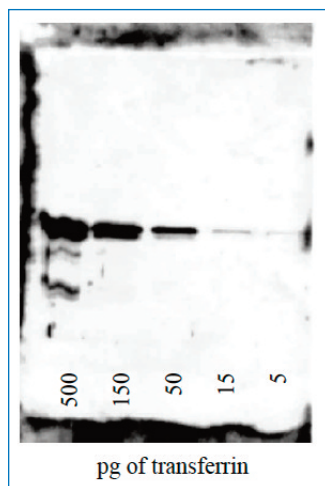
- ✱ **Highly sensitive** – approximately 5 pg per band of target protein on Western blot
- ✱ **Sustained luminescence** – signal is sustained for over several hours
- ✱ **Dual signal functionality** – chemiluminescent and chemifluorescent signals are generated simultaneously allowing detection on x-ray film or with a digital imager

### Reaction Mechanism



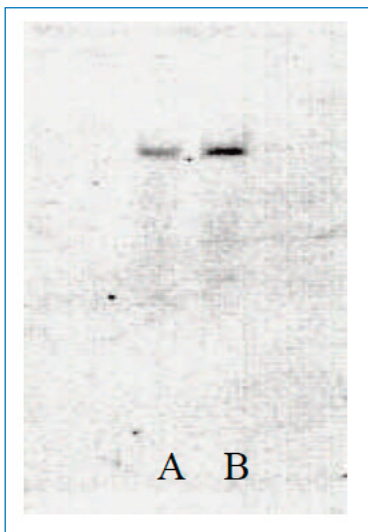
### Western Blotting

This image from a Western blot analysis of human transferrin was made after an 11 minute incubation of the PVDF membrane with Lumigen ECL Plus with a 10 second exposure to film. Exposures of a few seconds within the first 2 hours were sufficient to detect 5 pg of transferrin. All bands were detectable up to 20 hours with longer exposures.



## Southern Blotting

This image from a Southern blot of a single copy gene of mouse genomic DNA was made after an 9 minute incubation of the PVDF membrane with Lumigen ECL Plus with a 10 minute exposure to Kodak X-OMAT film. Band A =  $1.1 \times 10^{-17}$  moles DNA, while Band B =  $2.2 \times 10^{-17}$  moles DNA.



### Product Specifications

Enzyme	Horseradish Peroxidase (HRP)
Application	Western Blotting
Sensitivity	Low picogram to mid femtogram

### Ordering Information

Description	Catalog Number
Lumigen ECL Plus (100 mL)	PS3-100

Please visit [www.LUMIGEN.com](http://www.LUMIGEN.com) or contact LUMIGEN to request a quote.

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22900 W. 8 Mile Road • Southfield MI 48033 USA • Telephone: 248 351-5600 or 877 LUMIGEN • Facsimile: 248 351-0518 • [www.LUMIGEN.com](http://www.LUMIGEN.com)

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