

# LUMIGEN® PS-3 CHEMILUMINESCENT SUBSTRATE

## Features

### Southern Blotting

#### Excellent Sensitivity

Single copy genes can easily be detected.

#### Sustained Luminescence

Produces a sustained emission for several hours.

#### Short Exposures

Exposures as short as 10 minutes on x-ray film are sufficient to detect a single copy gene at a loading of  $1.1 \times 10^{-17}$  moles of DNA.

### Western Blotting

#### Excellent Sensitivity

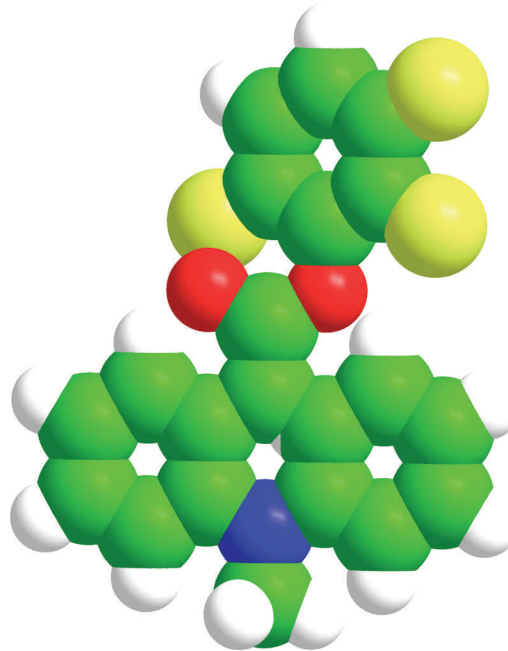
Less than 5 pg per band of transferrin can be detected.

#### Sustained Luminescence

Produces a sustained emission for several hours.

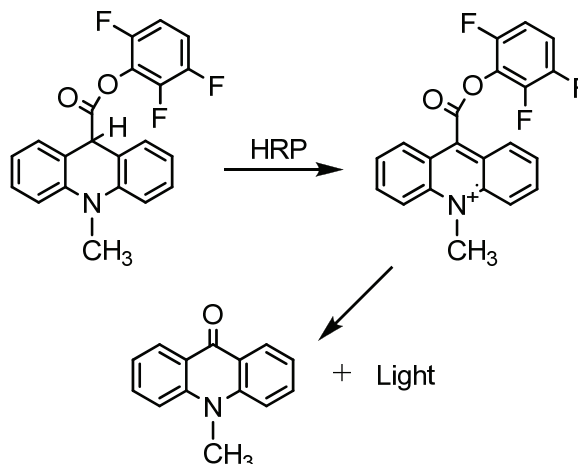
#### Short Exposures

Exposures as short as 10 seconds are sufficient to detect 5 pg per band of transferrin.

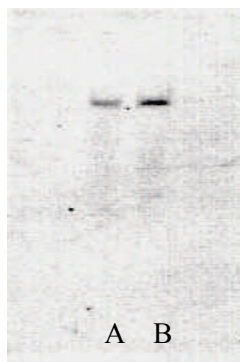


Lumigen PS-3 utilizes a unique technology for the chemiluminescent detection of HRP conjugates. The process, which provides superior sensitivity and ease of use, involves the enzymatic generation of acridinium esters. Reaction of the acridan substrate with an HRP label generates thousands of acridinium ester intermediates per second which react with peroxide at alkaline pH to produce sustained high intensity chemiluminescence.

## PS-3 REACTION MECHANISM

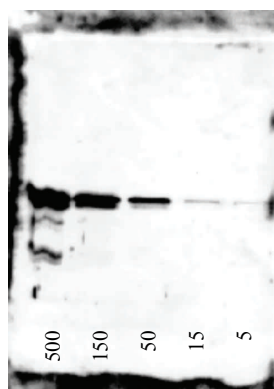


## SOUTHERN BLOTTING



This image from a Southern blot of a single copy gene of mouse genomic DNA was made after an 9 min incubation of the PVDF membrane with Lumigen PS-3 with a 10 min 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.

## WESTERN BLOTTING



pg of transferrin

This image from a Western blot analysis of human transferrin was made after an 11 min incubation of the PVDF membrane with Lumigen PS-3 with a 10 sec 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. GE Healthcare is the exclusive supplier of Lumigen PS-3 for Western blotting applications.

## PRODUCT SPECIFICATIONS

<b>Enzyme</b>	Horseradish Peroxidase
<b>Application</b>	Blotting
<b>Analytical Sensitivity</b>	$10^{-17}$ moles HRP
<b>Storage Conditions</b>	2-8° C; Store in amber bottles
<b>Stability</b>	2 Years at 2-8° C
<b>Working Solution</b>	2 Part solution (A & B)

## ORDERING INFORMATION

Description	Cat. No.
Lumigen PS-3 (100 mL A & 2.5 mL B)	PS3-100

## CONTACT INFORMATION



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Lumigen PS-3