

# LUMI-PHOS<sup>®</sup> 530 CHEMILUMINESCENT SUBSTRATE

## Features

### Excellent Sensitivity

$10^{-21}$  moles alkaline phosphatase can be detected.

### Sustained Luminescence

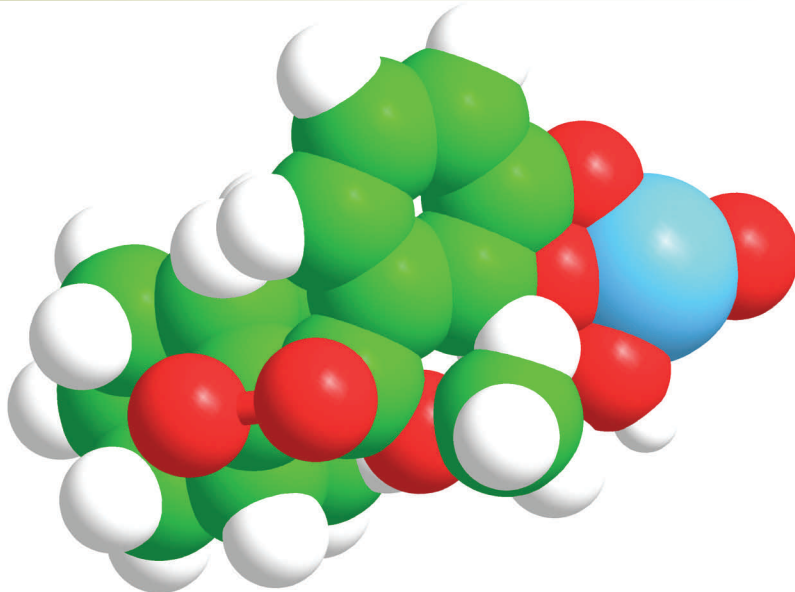
With low concentrations of enzyme, the light intensity remains constant for several hours.

### Linear Calibration Curves

The luminescence intensity at any time point is a direct measure of the concentration of the enzyme.

### Blotting

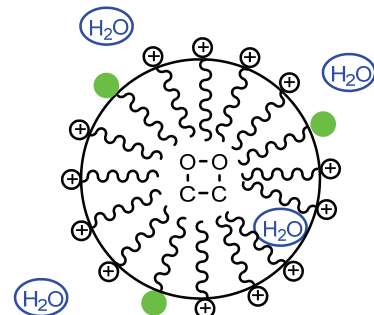
Lumi-Phos 530 can be used in blotting applications on PVDF and nylon membranes.



Lumi-Phos 530 is a ready-to-use formulation containing Lumigen PPD (4-methoxy-4-(3-phosphatophenyl) spiro[1,2-dioxetane-3,2'-adamantane], disodium salt) plus a fluorescent surfactant as an additional enhancer for chemiluminescent detection of alkaline phosphatase. This formulation is useful for chemiluminescent detection of alkaline phosphatase conjugates in immunoassays and DNA probe assays. It provides ultra sensitive detection with magnetic particles, beads, tubes, microwell plates and on nylon and PVDF membranes. For experiments on nylon or PVDF membranes with Lumi-Phos 530, the membrane is saturated with the material and incubated at room temperature or 37° C for periods ranging from 30 min to overnight. After incubation an image is recorded with X-ray film or a CCD camera. Lumi-Phos 530 is 10,000 times more sensitive than colorimetric substrates in solution. As little as 0.001 attomoles of enzyme can be detected.

## CHEMILUMINESCENT ENHANCEMENT

The unique co-surfactant system promotes energy-transfer to the fluorescent head groups causing the generation of luminescence with a broad maximum at 530 nm.

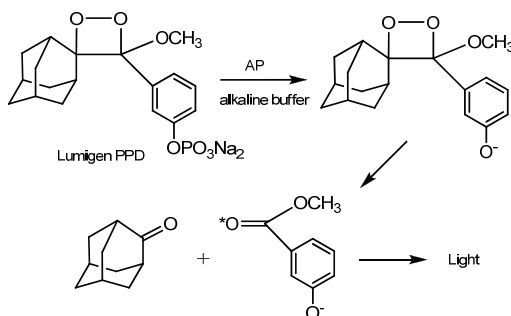
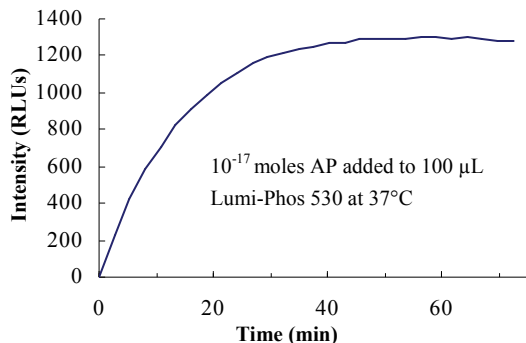


⊕ ~~~~~ CTAB

● ~~~~~ Fluorescein Co-Surfactant

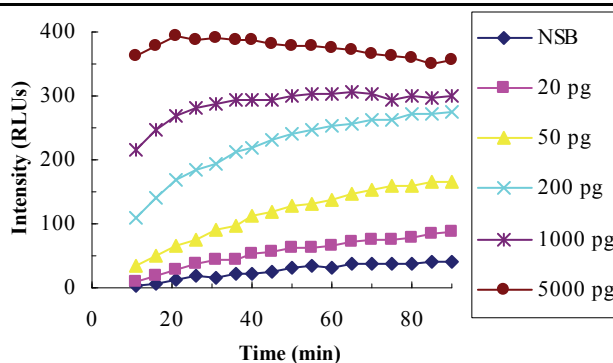
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## SOLUTION KINETIC PROFILE



## WESTERN BLOTTING KINETIC PROFILE

Time profile of light emission from a Western blot of various amounts of human transferrin on PVDF membrane. Data were taken with a CCD camera with 10 sec exposures per time point.



## PRODUCT SPECIFICATIONS

<b>Enzyme</b>	Alkaline Phosphatase
<b>Application</b>	ELISA / Western Blotting
<b>Analytical Sensitivity</b>	$10^{-21}$ moles AP
<b>Storage Conditions</b>	2-8° C; Store in amber bottle
<b>Stability</b>	2 Years at 2-8° C
<b>Working Solution</b>	1 Part, Ready to Use Solution

## ORDERING INFORMATION

Description	Cat. No.
Lumi-Phos 530 (100 mL)	P-501
Lumi-Phos 530 (125 mL)	P-5125
Lumi-Phos 530 (250 mL)	P-525
Lumi-Phos 530 (500 mL)	P-505
Lumi-Phos 530 (1 L)	P-5000

## CONTACT INFORMATION



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