

## DNA Analyst Training Laboratory Training Manual

Protocol 2.14  
Bloodstain Indication: Luminol Test



This laboratory protocol (or part thereof) has been provided as an example of a laboratory SOP, courtesy of the Illinois State Police. It has been included for training and example purposes only.

PRESIDENT'S  
**DNA**  
INITIATIVE



## INTRODUCTION

This test is used to help locate bloodstains at crime scenes.

## SAFETY CONSIDERATIONS

Sodium Carbonate - Caution! Irritant!

Sodium Perborate - Caution! Irritant!

## PREPARATIONS

Two formulations are presented:

Formula #1:Luminol*	0.1 g.
Sodium Carbonate	5.0 g.
3% Hydrogen peroxide	500 ml.

or

Formula #2:Luminol*	0.1 g.
Sodium carbonate	5.0 g
Sodium perborate	0.7 g.
Distilled water	100 ml.

\*Luminol = 3-Aminophtalhydrazide

## INSTRUMENTATION

No Instrumentation Required.

## MINIMUM STANDARDS & CONTROLS

Test with known bloodstain and negative control.

## PROCEDURE OR ANALYSIS

1. Spray test solution lightly over area to be examined and quickly observe in total darkness.
2. Pale to bright blue luminescence is a positive test for peroxidase activity, indicative of hemoglobin. Luminescence should last for 30 seconds to 1 minute. This test is not confirmatory for the presence of blood.
3. Certain metals and surface coatings can produce false positive luminescence.
4. The luminescence can be photographed with high speed, high contrast black and white film.

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