



RICIN

Protocol Overview and Methods:

A toxin is a specific product of the metabolic activities of a living organism and is usually very unstable. Ricin is a glycoprotein that inhibits cellular protein synthesis. Ricin toxin is a byproduct of the castor bean plant, *Ricinus communis*.

The Delaware Public Health Laboratory (DPHL) can test for Ricin toxin using Time-Resolved Fluorescence (TRF).

- TRF immunoassays are essentially non-specific “sandwich” ELISAs. The sandwich ELISA measures the amount of antigen between two layers of antibodies: a capture and a detection antibody. The antigen (if present) will bind to the capture antibody and the detector antibody will bind to the antigen, hence forming a “sandwich”.
 - **The detector antibody used in the assay is Europium, a compound used to manufacture glass. No glass is to be used while collecting or storing samples suspected to contain ricin toxin as it will yield inaccurate/incorrect TRF results.**

Contact Information: DPHL Director: 302-223-1520. Answering service is available at the same number during non-business hours.

For More Information: **24/7 CDC Emergency Contact Number: 1-888-295-5156**
<http://www.cdc.gov/az/>