

Approved by Director: Dr. Guy Vallaro

A. PURPOSE:

To identify p30 (ABAcad®) in Forensic samples.

B. RESPONSIBILITY:

Forensic Science Examiners from the Connecticut State Forensic Science Laboratory who have been trained in the discipline of rapid immunoassay tests for semen according to SOP-FB-31 (Training Manual).

C. DEFINITIONS:

ABAcad®: Rapid Immunoassay

D. PROCEDURE:

The p30 ABAcad® test will be performed at the discretion of the examiner based on the submitting agency requests, case information and the condition of the evidence.

1. Materials:

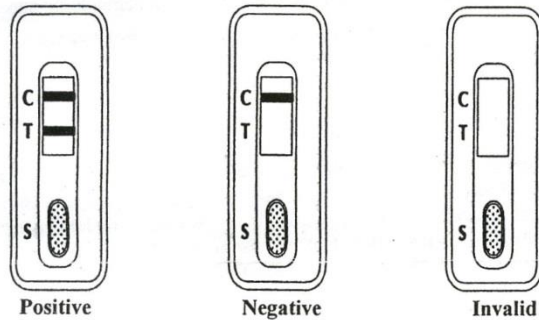
- a. Extracted samples
- b. ABAcad® test device and enclosed dropper
- c. Microcentrifuge tubes
- d. Spot plates
- e. Micropipet and tips

2. Procedure:

- a. Bring extracted samples and test devices to room temperature before use (approximately 10 minutes).
- b. Label ABAcad® with case and item numbers.
- c. Using the enclosed dropper, add 6-7 drops (~200µl) of supernatant to well "S" of the test device. Note the time immediately after adding the sample.
- d. Monitor progress of test results for a 10-minute period. Record final result at 10 minutes. DO NOT record any changes which occur after 10 minutes. Any change in test results after 10 minutes is invalid.

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3. Results:



- a. **Positive.** If there are two pink lines, one each in the test area 'T' and in the control area 'C', the test result is *positive* and indicates that the p30 level is present at or above 4ng/ml.
- b. **Negative.** If there is only one pink line in the control area 'C', the test result is *negative*. This may indicate that no p30 is present, the p30 level is below 4ng/ml or the presence of the "High Dose Hook Effect".
 - aa. "High Dose Hook Effect" refers to weak positive or false negative results due to the presence of a high concentration of p30 in the sample.
 - bb. In such cases or when a strong Acid Phosphatase reaction is observed, the extract may be diluted 1:20 and rerun with the ABACard® Procedure.
- c. **Inconclusive/Invalid.**
 - aa. If there is no pink line visible in the control area 'C', the test is *inconclusive*. Review the test procedure carefully and repeat the test with a new plate.
 - bb. If there is no distinguishable pink line in the test area "T".

4. Record the results of the control(s) and sample(s) on the appropriate Quality Record Worksheet.

Note: The reason a result is determined to be inconclusive must also be recorded.

5. Record test(s) used on the General Reagent Sheet (FBQR-09).

E. REFERENCES:

**State of Connecticut Department of Emergency Services and Public Protection
Division of Scientific Services**

Documents outside of Qualtrax are considered uncontrolled.

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1. Abacus Diagnostics' *OneStep* ABACard® p30 Test For The Forensic Identification of Semen, provided Technical Information and Protocol sheet.
2. Connecticut State Forensic Science Laboratory, ABACard® p30 Internal Validation, 1998.
- E. 3. Connecticut State Forensic Science Laboratory, RSID™ - Semen Internal Validation, 2010.
4. Independent Forensics, RSID™ - Universal Buffer Technical Information and Protocol sheet.
5. Connecticut State Forensic Science Laboratory, RSID™ - Universal Buffer Internal Validation, 2011.