



EXCELLENCE IN FORENSIC BIOLOGY



**BODILY FLUIDS TEST KITS**  
LABORATORY + CRIME SCENE

**SERAQUANT READER**



[WWW.SERATEC.COM](http://WWW.SERATEC.COM)

## ABOUT US

Founded in 1987 as a research spin-off company in the old university town of Goettingen, Germany, SERATEC® GmbH has more than 25 years of experience in research and development, production and sales of immunochromatographic assays with particular focus on Forensic Biology.

Our test kits for the rapid detection of human bodily fluids help preselect circumstantial evidence for DNA analysis. Various products for both laboratory and crime scene testing are available to meet the sophisticated requirements of crime laboratories.

Whatever we do, we make highest demands on ourselves. SERATEC® is ISO 9001 and ISO 13485 certified. Our employees face challenges of R&D, production and customer service with utmost professionalism.

Customer's opinion is the most valuable asset. We encourage forensic scientists from crime laboratories and educational institutions to be actively involved in product development and validation.

Consistently high quality, comprehensive knowledge and expertise, fair prices and great respect towards customers, partners and competitors. This is what SERATEC® stands for.



**SERATEC®**  
EXCELLENCE IN FORENSIC BIOLOGY





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## BODILY FLUIDS TEST KITS

Today's forensic biologist needs a rapid, accurate, sensitive and inexpensive screening tool to analyze potential biological fluid stains and send them for DNA analysis. SERATEC® offers test kits for the qualitative detection of human seminal fluid, blood, menstrual blood and saliva as well as the SeraQuant reader for the quantitative analysis.

**PLEASE CONTACT US FOR**  
+ free samples for validation  
+ technical advice  
+ workshops & demos  
+ R&D cooperation



 **SERATEC®**  
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# HUMAN SEMINAL FLUID PSA



## PSA Semiquant CRIME SCENE KIT

Cat.No. PSM-CS/20

BOX 20 kits of 1 card (pouched, with  
Pasteur pipette and desiccant)  
1 vial with buffer solution  
1 DNA-free swab for sample collection

## PSA Semiquant LABORATORY KIT

Cat.No. PSM400F/40

UNIT Box, 40 cards, each pouched with  
Pasteur pipette and desiccant;  
1 vial 50 mL of dilution buffer

- + Ready to use, robust kit; both cards and buffer can be stored at room temperature
- + Long shelf life of 24 months after manufacture  
Fast and accurate: reliable results after only 5-10 minutes
- + High sensitivity: detects 1 ng/mL PSA or a  $10^{-6}$  dilution of semen
- + High specificity: cross reacts only with the seminal fluid of primates

# HUMAN BLOOD

# HEM



## HemDirect LABORATORY KIT

Cat.No. HBF07/30

UNIT 30 cards, each pouched with  
Pasteur pipette and desiccant;  
30 vials with dilution buffer

- + uses 2 murine monoclonal anti-human hemoglobin antibodies as active components. When hemoglobin is present, a red line will appear in the test region for a positive result. Internal control results is a red line in the control region for a valid test.
- + Ready to use, robust kit; both cards and buffer can be stored at room temperature
- + Long shelf life of 24 months after manufacture  
Fast and accurate: reliable results after only 5–10 minutes
- + Very high sensitivity: detects 20 ng/mL hemoglobin or a  $10^{-7}$  dilution of blood
- + High specificity: cross-reactivity only with upper primate blood and ferret blood (weak); no reaction with animal blood



## HemDirect CRIME SCENE KIT

Cat.No. HBF-CS/20

- BOX 20 kits of 1 card (pouched, with  
Pasteur pipette and desiccant)  
1 vial with buffer solution  
1 DNA-free swab for sample collection



# MENSTRUAL BLOOD

# PMB



## DETECTION OF MENSTRUAL BLOOD

- + fast, sensitive and reliable presumptive test for menstrual blood
- + human d-dimer as marker for menstrual blood
- + human hemoglobin as control marker for human blood
- + test result in as fast as 10 minutes
- + ready-to-use, validated kit
- + buffer and card storable at room temperature

## PMB Test LABORATORY KIT

- 1. UNIT **Cat.No PMB/30**  
30 cards, each pouched with  
Pasteur pipette and desiccant;  
30 vials with dilution buffer
- 2. UNIT **Cat.No PMB/8**  
8 cards, each pouched with  
Pasteur pipette and desiccant;  
8 vials with dilution buffer

- + When menstrual blood is present, a red line will appear in the test region (M) for a positive result. The control line (P) will confirm the presence of human hemoglobin.
- + Sample material remains suitable for other commonly used methods such as DNA extraction and profiling
- + Long shelf life of 24 months after manufacture

# HUMAN SALIVA

# AMY



## AmylaseTest LABORATORY KIT

Cat.No. AMY/40

UNIT Box, 40 cards, each pouched with  
Pasteur pipette and desiccant;  
1 vial 50 mL of dilution buffer

- + Ready to use, robust kit; both cards and buffer can be stored at room temperature
- + Long shelf life of 24 months after manufacture
- + Fast and accurate: reliable results after only 5–10 minutes
- + Very Sensitive: 1:10,000 dilution of saliva shows positive result
- + Specific: no reaction with animal amylase except for primates; cross-reaction observed with pan creatic amylase

## AmylaseTest CRIME SCENE KIT

Cat.No. AMY-CS/20

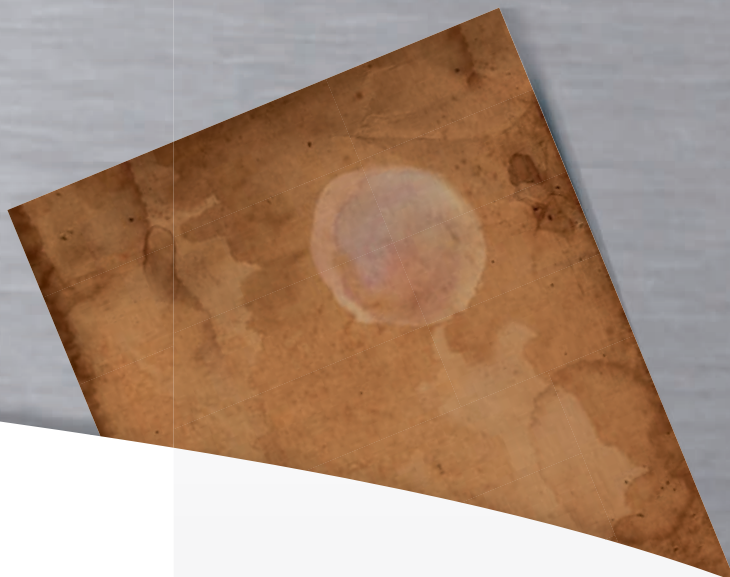
BOX 20 kits of 1 card (pouched, with  
Pasteur pipette and desiccant)  
1 vial with buffer solution  
1 DNA-free swab for sample collection





# SALIVA

## AMYLASE PAPER



### INTERPRETATION OF RESULTS

**POSITIVE** a white area surrounded by a blue background indicates a presumptive positive result for saliva

**NEGATIVE** no white area is visible on the Amylase Paper

- + Very fast, mapping results in less than 10 minutes
- + As sensitive as 125 mIU/mL Amylase
- + Presumptive results can be confirmed with the alpha-Amylase specific SERATEC® AmylaseTest
- + Sample material remains suitable for DNA extraction and profiling

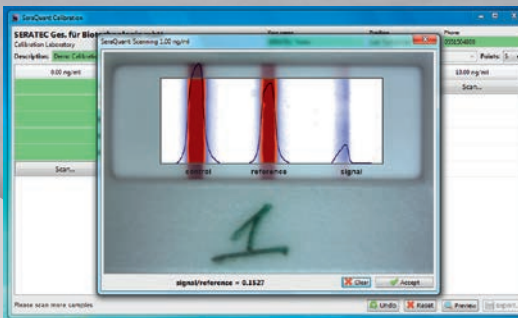
### Amylase Paper LABORATORY KIT

- 1. UNIT **Cat.No AMY-P/25**  
25 A4 sheets
- 2. UNIT **Cat.No AMY-PS/25**  
25 A4 sheets + 50 mL of Iodine stock solution

### AMYLASE MAPPING

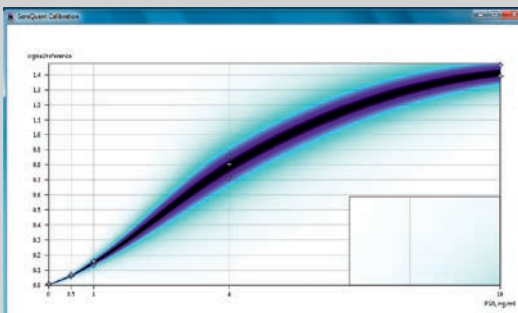
- + fast and reliable presumptive test for saliva
- + on any type of fabric or material
- + compatible with other detection techniques

1. Moisten the Amylase Paper with distilled water
2. Place over the suspected stain and press for 10-15 seconds
3. Remove the Amylase Paper from the suspected stain and incubate for 10 minutes at room temperature
4. Pour or spray the Iodine working solution over the Amylase Paper



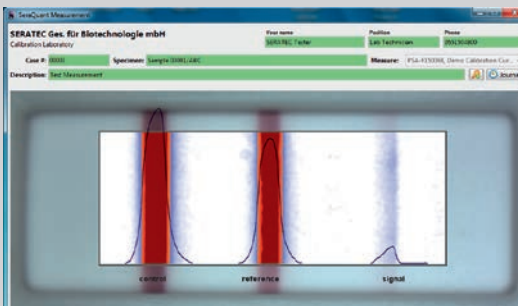
## CALIBRATION TOOL

The Calibration Tool of the SeraQuant measures the absolute intensity levels of a series of known dilutions. It takes only 20 minutes to create a calibration curve of decent quality.



## CURVE GRAPH

Example of a calibration curve graph for PSA, with a distinct differentiation of low concentrations between 0.0 ng/mL and 1 ng/mL PSA.



## QUANTITATION

Example quantitation of an unknown weak concentration determined by a PSA Semiquant test.



## PROTOCOL

Automatic protocol contains all the details relevant for a consistent documentation of every measurement.

# THE SERAQUANT READER



The SeraQuant is an instrument for the computer-based, quantitative analysis of the SERATEC® test kits and the automatic, consistent result documentation.

The color intensity of the cassette result lines varies depending on concentration which enables a calculation of the concentration value (measurement) based on calibration curve.

With the SeraQuant, it is possible to create calibration curves for all three parameters used in Forensic Biology (PSA, Hemoglobin and alpha-Amylase) and therefore set user-specific standards of calibration and measurement quality.

The results of the cassette testing are automatically read by a camera under standard and consistent conditions and not by the naked eye. This procedure ensures that there is no room for subjective interpretation of results.

A unique sophisticated algorithm is able to accurately distinguish between very low positive and negative results.

Measurements are stored as secure files along with both image and descriptive data provided by user as well as calibration details for full traceability.



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