# AXOScience Solutions State State

# **Detection of Semen Traces from Sexual Assault Evidence**

Sexual assaults are usually unwitnessed and being able to detect offender's semen traces on evidences plays most of the time a crucial role in corroborating victim's allegations during investigation phase.

Forensic laboratory personnel often face the difficult task to locate semen traces from sexual assault evidence within a short period of time. If UV light and alternate light sources are widely used within forensic laboratories, scientific literature agrees that it shows many disadvantages. The main weakness being lots of false positive traces that are then time and money consuming to exclude from the analysis. Moreover, according to fabric and color, one can admit that a very important percentage of semen traces are not being detected by alternate light sources available on the market.

After years of research in collaboration with the French National Institute of Scientific Police (INPS/LPS69) and ICBMS (UMR5246), AXO Science is now bringing to the forensic experts STK Lab (INPI DSO 2017000128).



STK Lab offers many advantages to forensic laboratories personnel in detecting semen stains:

- **Sensitive:** do not miss any single semen stain by using the most sensitive technique available
- **Specific:** do not waste time & money with false positive, only semen will show, even if mixed with other body fluids
- Non Toxic: human and environmental friendly. Get rid of carcinogen, time-consuming AP reagents
- Easy and Ready to Use: simple and rapid 4 steps protocol



Allow precise and easy sampling once semen is detected

STK Lab is ready to be used without any prior hands-on:

- Format: Continuous roll: 0.92m x 40m or 0.92m x 10m, and A3 sheets: 20 pieces. STK can be cut easily to fit evidence shape
- Shelf life: 12 months
- ISO 18385 Forensic Grade
- Batch number, produced according to ISO 9001 standards
- Do not alter DNA. Fully compatible with extraction techniques

## Simple and rapid 4 steps protocol



Using a sprayer, **wet absorbing side** of a piece of STK Lab with demineralized water



**Cover** area to be tested with wet absorbing side against the item. Sandwich the item to analyse both sides



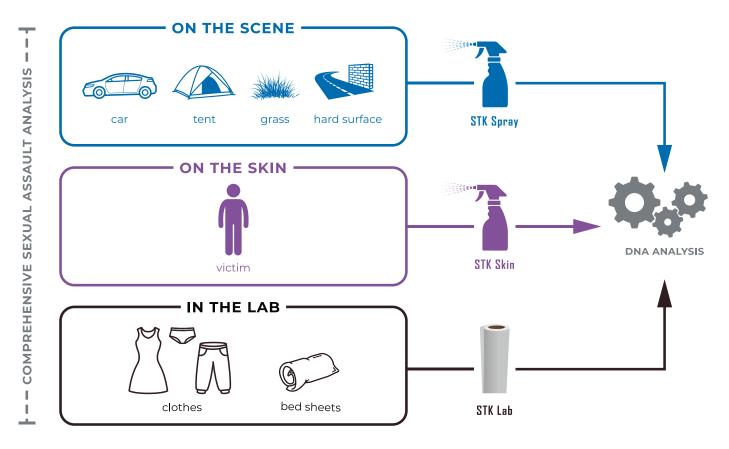
Press for 3 minutes



**Read results** with a 365nm UV light with visible light filter: only semen stains will glow in a blue color

### Complete screening of the rape scene: STK Lab, STK Spray & STK Skin

Detecting assaulter's sperm plays a critical role in rape cases resolution. These traces can be collected on the crime scene, on clothes and other personal goods within the crime lab, and also directly on victim's body. AXO Science offers to forensic examiners and scientific polices a unique solution for each situation.



### **AXO Science**

AXO Science develops innovative solutions in the field of molecular biology and forensic. We are now bringing to forensic scientists the STK Sperm Tracker technology, which is revolutionizing the detection of sperm traces on the rape scene and in the laboratory. AXO Science is ISO 9001, ISO 13485 and ISO 18385 certified.



Via Rio nell'Elba, 140 – Rome / ITALY Phone + 39 06-8818936 / 8800211 – Fax + 39 06-8815319 Email <u>info@sichim.com</u> Web-Site <u>www.sichim.com</u>