SINGLE SOURCE MALE PROFILES FROM SEXUAL ASSAULT EVIDENCE ERASE – SPERM ISOLATION KIT

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Obtaining a clean male profile from a sexual assault is often very difficult or impossible using standard differential extraction methods. Alternative extraction methods may improve separation but a significant portion of the sperm sample may be lost in the process. The *Erase* – Sperm Isolation Kit provides a clean male profile without loss of sperm cell DNA in both single tube and 96 well platforms. Using this method, epithelial cells are differentially lysed and a single centrifugation step is performed to pellet the intact sperm cells. After obtaining an epithelial cell DNA fraction, the epithelial DNA remaining in the tube is destroyed using a DNA nuclease. The nuclease destroys DNA in solution, but does not attack the DNA contained within the sperm cells. Once the solublized epithelial DNA is degraded, nuclease activity is stopped and the sperm cells are lysed. Using the *Erase* – Sperm Isolation Kit, it is possible to obtain a clean male profile, with minimal hands on time, even when the ratio of epithelial cells to sperm cells is very high. Validation of this method has been performed using several DNA purification platforms.