

# FORENSIC BIOLOGY SEROLOGY PROCEDURES MANUAL

Kastle-Meyer (KM) Presumptive Testing for Blood		
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## Kastle-Meyer (KM) Presumptive Testing for Blood

### 1 GENERAL

- 1.1 A Kastle-Meyer test may be performed directly on a cut out portion of a stain, an extract of a stain, or a “wipe” of the stained material. A wipe may be made using a piece of filter paper, thread, or swab. Wet the wipe with water, then rub over the stained area while still wet.

### 2 CONTROLS

- 2.1 Positive and negative controls must be used to test each lot/aliquot of reagent at least once per day and before any evidence items are tested. Blood must be used as a positive control. A drop of deionized water may be used for the negative control. If controls do not pass, inform the Quality Assurance Team immediately.

### 3 REAGENT

- 3.1 Dropper bottles (aliquots) of KM reagent are generally set aside for use during testing. If dropper bottles are empty, they should be refilled using the KM stock, and a layer of Zinc dust **MUST** be added to the bottom of the dropper bottles to prevent oxidation of the reagent.

### 4 PROCEDURE

- 4.1 Apply a drop of KM reagent if using a wipe. If performing directly on a cut out portion of a stain, use enough until sample is covered. Observe any color change.
- 4.1.1 A normal color reaction is a greenish/gray tint with the presence of possible blood.
- 4.1.2 A PINK COLOR HERE IS DUE TO THE PRESENCE OF AN OXIDIZING AGENT (e.g., a chemical oxidant), NOT BLOOD. **If a pink color occurs at this point, the testing results should indicate “inconclusive.”**
- 4.2 Add a drop of 3% hydrogen peroxide. An immediate pink color is a positive result.