HACKETTSTOWN REGIONAL MEDICAL CENTER
LABORATORY POLICY MANUAL
URINE OR SERUM KETONES
(USING BIO-RAD QUANTIFY)

==========

Effective Date: April, 2009	**Policy No: UA126.01**
Cross Referenced:	**Origin: Urinalysis**
Reviewed Date: 6/2012	**Authority: Laboratory Director**
Revised Date:01/12	**Page: 1 of 2**

PRINCIPLE: excessive formation of ketone bodies results in increased blood concentration and increased excretion in the urine. This process is observed in conditions associated with a decreased intake of carbohydrates, such as starvation, digestive disturbances, dietary imbalance, and frequent vomiting. Acetest tablets contain a mixture of glycine, sodium nitroprusside di-sodium phosphate and lactose. Acetone in the pretence of glycine will form a lavender/purple colored complex with nitroprusside. Disodium phosphate provides an optimal pH for the reaction, and lactose enhances the color.

SPECIMEN COLLECTION
A fresh urine or serum specimen is preferred. If the urine is not tested within 30 minutes, the sample should be refrigerated. Urine preservatives may affect the results.

REAGENTS AND EQUIPMENT:

Acetest Reagent Tablets: stable until expiration date in the unopened container when stored at temperatures between 15 - 30◦ C. Do not store the bottle indirect sun. Replace cap promptly and tightly after use. Protection against exposure to light, heat and ambient moisture is mandatory to guard against altered reagent reactivity. Once opened, Acetest Reagent Tablet stability is decreased on exposure to moisture. The bottle must be recapped promptly after removing a tablet. Tablets should be used on a regular basis and not stored for an extended period of time after the bottle is opened. Deterioration of the tablets may be noted by a tan to brown discoloration.

Pipette
Paper Towel

QUALITY CONTROL
A positive and negative control is run once each day Acetest is used and whenever a new bottle of reagent tablets is opened. Bio-Rad qUAntify Level 1 (neg) and Level 2 (pos) is used. Enter results of testing on log sheet whenever testing is performed.

PROCEDURE:

1. Remove tablet from bottle and recap promptly. Place tablet on a clean , dry, white paper towel.
2. Put one drop of urine or serum (or control) directly on top of the tablet.
3. After 30 seconds, compare color of tablet to color chart provided with Acetest tablets.
4. Document QC on log sheet with a check or “CA” for corrective action
5. If QC is out of tolerance limits, repeat test, if still out, examine tablet for decomposition and open a new bottle or choose a new control.
6. Document on log and notify supervisor if necessary

REPORTING RESULTS
Results with Acetest are recorded as negative if no purple color is apparent on tablet at the end of the reaction time. Any pink, tan or yellow color is disregarded

Positive results are recorded as small, moderate, or large as compared with the color chart

REFERENCES
Ictotest Reagent Tablet Product Insert. Siemens Healthcare Disgnositcs, Inc. Tarrytown, NY. Rev 8/08.