

# COULTER LH Series RETIC PAK Reagent Kit

REF 8547196

PN 179643-CB



## For In Vitro Diagnostic Use

### INTENDED USE

For use on the COULTER LH 750 and LH 780 hematology analyzers for clearing red cells and staining reticulocytes. Use with only LH Series or ISOTON 4 diluent. Refer to your instrument product manuals and/or online help.

### SUMMARY

Reticulocytes are immature erythrocytes (red blood cells) that retain a small amount of RNA as the nucleus is extruded during the maturation process. To detect the presence of this RNA, the red blood cells are stained while they are still viable in a process called supravital staining. Once a whole-blood sample is prepared, reticulocytes are differentiated from mature red blood cells and other cell populations using VCS and reticulocyte counting technologies.

### PRINCIPLES

New Methylene Blue (Reagent A), a supravital dye, is incubated with a whole-blood sample. The dye precipitates the basophilic RNA network found in reticulocytes.<sup>1</sup> A clearing reagent (Reagent B) removes hemoglobin and unbound stain from the erythrocytes (red blood cells or RBCs) while keeping the cell and its membranes intact and without removing the precipitated dye - RNA complex. This process results in clear spherical mature RBCs and darkly stained reticulocytes that are ready for analysis. The total RBC population is analyzed on a hematology analyzer with reticulocyte counting technology using impedance, radio frequency, and laser light scatter measurements (VCS technology) then reticulocytes are differentiated from mature red blood cells and other cell populations.

### REACTIVE INGREDIENTS

The COULTER LH Series RETIC PAK Reagent Kit contains the following:

#### REAGENT A - Retic Stain

New Methylene Blue in Buffered Solution.....0.06% (w/v)

#### REAGENT B - Retic Clear

Sulfuric Acid with Stabilizers.....0.15% (w/v)

### WARNINGS

- Product contains <1.0% Sulfuric Acid.
- Do not inhale and/or ingest.
- Avoid eye and skin contact. In case of eye or skin contact, flush affected area with copious amounts of water for at least 15 minutes.
- DO NOT REUSE CONTAINERS.

### STORAGE, STABILITY, AND DISPOSAL

- Store COULTER LH Series RETIC PAK Reagent Kit at 2-30°C.
- Do not use product past expiration date.
- Use product at temperatures stated in the instrument product manuals and/or online help.
- Opened containers are stable for 60 days when stored as recommended.
- Dispose of waste product, unused product, and contaminated packaging in compliance with federal, state, and local regulations.

### PREPARATION

Reagents in the COULTER LH Series RETIC PAK Reagent Kit are ready to use. Replace the reagent kit as directed in your instrument product manuals and/or online help.

To avoid cross contamination when replacing the LH Series RETIC PAK Reagent Kit, transfer pickup tubes one at a time beginning with Reagent A (Retic Stain) and then Reagent B (Retic Clear).

**IMPORTANT:** If product has been partially or completely frozen, allow product to warm to room temperature. Mix product by gentle inversion prior to placement on the instrument. Install and prime the reagent kit as directed in your instrument product manuals and/or online help. Verify background counts are acceptable before analyzing patient samples.

### REFERENCES

1. Brecher G. 1949. New methylene blue as a reticulocyte stain. *Am J Clin Path*, 19:895.

### PRODUCT AVAILABILITY

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(Contains 1 x 380 mL Reagent A and 1 x 1900 mL Reagent B)

### TRADEMARKS

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For additional information or if damaged product is received, call Beckman Coulter Customer Service at 800-526-7694 (USA or Canada) or contact your local Beckman Coulter Representative.

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