

## **TEST: CBC WITH 5 PART DIFFERENTIAL**

### **PRINCIPLE**

This test measures red blood cells and white cells. The test includes: red blood cell count, hemoglobin, hematocrit, MCV, MCHC, RDW, platelet count, white blood cell count, neutrophils, lymphocytes, monocytes, eosinophils and basophils.

### **SPECIMEN COLLECTION AND PREPARATION**

Whole blood collected in EDTA (purple top tube) is the only acceptable specimen. The specimen must be kept and transported at room temperature. For best results, the collection tube should be full and no less than half full. Mix the specimen slowly for 2 minutes.

#### **Unacceptable specimens include:**

- Any sample not collected in an EDTA tube.
- Any tube less than half full
- Any tube that is not labeled properly
- Hemolyzed specimens
- Specimens older than 24 hours
- Specimens that are clotted

**METHOD:** VCS Technology, Hemoglobinometry

### **REFERENCES**

1. Bender et al., Clinical Laboratory Procedure Manual, NCCLS Code GP2-A, Vol. 4, No. 2.
2. Coulter MAXM Reference Manual, Coulter Corporation, 1995.
3. Coulter MAXM Operators Guide, Coulter Corporation, 1995.
4. Coulter MAXM, S-CAL Kit Package Insert, 1985-1993  
Coulter MAXM, 5C Plus Coulter Cell Control Insert
5. Lotspeich-Steininger C., Stiene-Martin, E.A. and Koepke, J.A., Clinical Hematology: Principles, Procedures, Correlations, J.B. Lippincott Co., Philadelphia, 1992.
6. MAXM, Special Procedures and Troubleshooting, 1995
7. O'Connor, B.H., A Color Atlas and Instructional Manual of Peripheral Blood Cell Morphology, Williams & Welkins, Baltimore, 1984.

**Normal Range:** See lab report

**Turnaround time:** 1 day