

TEST: TOTAL IRON BINDING CAPACITY (TIBC)

PRINCIPLE:

The VITROS slides are dry, multilayered analytical elements coated on polyester supports. A small amount of patient sample is deposited onto the slide and evenly distributed to all of the layers. The spreading layer contains the appropriate substrate and other components needed for the reaction. The analyte in the sample catalyzes the reaction sequence to yield products which absorb light at wavelengths in various regions (340 – 680nm), diffuses into the underlying layer, and is monitored by reflectance spectrophotometry. The test types are colorimetric, enzymatic end point, two-point or multi-point rate, or potentiometric. The rate of change in reflection density is converted to enzymatic activity or the amount of colored complex formed is proportional to the analyte concentration in the sample.

SPECIMEN REQUIREMENTS:

2ml of serum collected in a red top tube with a serum separator (gel barrier).

Centrifuge the specimen after it has clotted to prevent hemolysis. Send to the lab at room temperature. If the blood is not sent to lab the same day it is drawn, centrifuge the specimen and refrigerate.

Serum that is hemolyzed and/or lipemic may interfere with some chemistries and may be rejected.

METHOD: Dry Slide Chemistry

REFERENCES:

1. Test Methodology, VITROS Chemistry Products. August 1997, Johnson & Johnson Clinical Diagnostics, Inc.

Normal Range:

TIBC: 250-450 µg/dl

Turnaround time: 1 day