



LABORATORY REPORT

NAME : MR.BC0683 REFERRED BY : SELF VISIT NO : VAMP26148159
AGE : 40Y 0M 0D ZERO TARIFF CLIENT CODE COLLECTED ON : 21-04-2026 10:00
GENDER : Male LAB MR# : AAMP01479438 RECEIVED ON : 21-04-2026 19:51
OP / IP / DG # : APPROVED ON : 22-04-2026 18:07
REPORT STATUS : Final Report



Test Name	Result	Biological Ref. Interval	Unit
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Iron Studies Profile

BIOCHEMISTRY

Iron Binding Capacity - Total (TIBC) (Serum)

Iron <i>FerroZine Colorimetric Assay</i>	125.0	59-158	µg/dL
Unsaturated Iron Binding Capacity (UIBC) <i>Direct determination with FerroZine</i>	302.0	125 - 345	µg/dL
Iron Binding Capacity - Total (TIBC) <i>Calculation</i>	427.0	228-428	µg/dL
Transferrin Saturation Index (TSI) <i>Calculation</i>	29.3	16-45	

Interpretation:

Iron is an essential trace mineral element which forms an important component of hemoglobin, metallocompounds and Vitamin A. Deficiency of iron, leads to microcytic hypochromic anemia. The toxic effects of iron are deposition of iron in various organs of the body and hemochromatosis. Total iron-binding capacity (TIBC) is an essential test used for the diagnosis of iron deficiency anemias and other disorders of iron metabolism. Iron binding capacity is the capacity of transferrin to bind with iron. Iron binding capacity is of two types, TIBC and unsaturated iron-binding capacity (UIBC). TIBC is the total of serum iron and UIBC. When iron stores are depleted, the transferrin levels increase in the blood. As only one-third of transferrin is saturated with iron, so the transferrin present in serum has an extra binding capacity. This is unsaturated iron-binding capacity.

Increases in iron-binding capacity are observed with the following:

- Iron deficiency states
- Acute liver damage
- Acute and chronic blood loss
- Late pregnancy
- Progesterone birth control pills

Decreases in iron-binding capacity are associated with the following:

- Hemochromatosis
- Hemosiderosis
- Thalassemia
- Hyperthyroidism
- Nephrotic syndrome

Anemia of chronic diseases **Transferrin Saturation** occurs in Idiopathic hemochromatosis and Transfusional hemosiderosis where no unsaturated iron binding capacity is available for iron mobilization. Similar condition is seen in congenital deficiency of Transferrin.

Sanjeeta

Dr. Sanjeeta
MBBS,MD (Biochemistry)
Consultant Biochemist





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Disclaimer:

1. All results released pertain to the specimen as received by the lab for testing and under the assumption that the patient indicated or identified on the bill/test requisition form is the owner of the specimen.
2. Clinical details and consent forms, especially in Genetic testing, histopathology, as well as wherever applicable, are mandatory to be accompanied with the test requisition form. The non-availability of such information may lead to delay in reporting as well as misinterpretation of test results. The lab will not be responsible for any such delays or misinterpretations thereof.
3. Test results are dependent on the quality of the sample received by the lab. In case the samples are preprocessed elsewhere (e.g., paraffin blocks), results may be compromised.
4. Tests are performed as per the schedule given in the test listing and in any unforeseen circumstances, report delivery may be affected.
5. Test results may show inter-laboratory as well as intra-laboratory variations as per the acceptable norms.
6. Genetic reports as well as reports of other tests should be correlated with clinical details and other available test reports by a qualified medical practitioner. Genetic counselling is advised in genetic test reports by a qualified genetic counsellor, medical practitioner or both.
7. Samples will be discarded post processing after a specified period as per the laboratory's retention policy. Kindly get in touch with the lab for more information.
8. If accidental damage, loss, or destruction of the specimen is not attributable to any direct or negligent act or omission on the part of Ampath Labs or its employees, Ampath shall in no event be liable. Ampath lab's liability for a lack of services, or other mistakes and omissions, shall be restricted to the amount of the patient's payment for the pertinent laboratory services.

