



IRON/TIBC

Liquid Stable Reagent

Store at Room temperature.

PRINCIPLE

The transferrin is saturated by adding a standard amount of Ferrous Iron. The excess of Iron is absorbed by $MgCO_3$. After centrifugation, Iron is measured in the supernatant.

REFERENCE VALUES

Serum	2.5 - 3.5 mg/l
	44.7 – 62.6 μ mol/l

These ranges are given for orientation only, each laboratory should establish its own normal ranges.

SAMPLES

Serum free of hemolysis.

REAGENTS

R₁ : Iron saturating solution 500 μ g/dl.

R₂ : Precipitant agent magnesium carbonate.

Reagents are ready for use and stable at room temperature.

PROCEDURE

The reagent is ready to use and stable at room temperature until the expiry date stated on the label

Serum	0.5 ml
RI Iron saturation solution	1.0 ml

Mix and incubate for 5 to 10 minutes then open and add one capsule of **R₂** (Magnesium carbonate), mix well for 2 minutes, then centrifuge at 2000-3000 r.p.m. during 5 minutes. Use the supernatant to determine the concentration of Iron.

Because the serum is diluted when the saturation solution is added, the result must be multiplied by 3 to correct the dilution.

CALCULATION

$$TIBC \text{ mg/l} = \frac{O.D \text{ Sample}}{O.D \text{ Standard}} \times n \times 3 \text{ (dilution)}$$

n = Standard concentration

LINEARITY

The test is linear up to 179 μ mol/l iron concentration

SENSITIVITY

It is recommended that each laboratory establishes its own range of sensitivity as this is limited by the sensitivity of the spectrophotometer used.

NOTES

Use a disposable materials.

Use a clear supernatant if not the supernatant must be decanted and centrifuged again.

The Iron/TIBC Kit doesn't contain reagent for the quantitative determination of iron in the supernatant.

PRESENTATION

1 X 50 ml Cat No 2301 50 Tests

BIBLIOGRAPHY

Piccardi G, Clin. Chim. Acta 40. 219 (1972).

Ramsay.W.N, Clin Chem 1.1 (1958).

The following symbols are used on labels



For in vitro diagnostic use



Use day (last day of the month)



Temperature limitation



Batch code



Code