



# Total Iron Binding Capacity (TIBC) Colorimetric Assay Kit

Cat No: HR3BC1169

For research use only

## Overview

Detection Method	Colorimetric method
Storage	2-8?
Instrument	Spectrophotometer(520 nm)
Assay Time	50 min
Validity	6
Assay Type	Quantitative
Sample Type	Serum
Synonyms	TIBC
Instrument	Spectrophotometer(520 nm)
Detection Principle	The excess iron is added to the serum to bind all the ferritin in the serum, and the excess iron is adsorbed by adding the iron adsorbent. The iron bind with the ferritin is separated from the protein by the action of acid solution and reductant. Fe <sup>3+</sup> in serum is reduced to Fe <sup>2+</sup> , Fe <sup>2+</sup> binds with bipyridine to form pink complex. In a certain range, the amount of TIBC is positively correlated with the depth of color. The iron content measured is, minus serum iron value, which is called unsaturated iron binding force. Total iron binding capacity minus serum iron value is unsaturated iron binding capacity (UIBC).
Reagents	Normal saline (0.9% NaCl)
Labware	Micropipettor, Water bath, Vortex mixer, Centrifuge
Size	50Assays
Sensitivity	0.03 mg/L
Detection Range	0.03-50 mg/L
Recovery Rate	100