



# Iron

## Synonyms

Fe

## Clinical Indication

The main use for this test is in the investigation of iron overload such as haemochromatosis, when the transferrin saturation should also be assessed. Iron levels are also useful in management of suspected iron poisoning or overdose.

Measurement of serum iron is of little relevance in the investigation of iron deficiency; levels fall during acute infection (e.g. a cold); in patients taking oral iron (or multivitamins) levels reflect recent intake and are not representative of the true physiological state.

## Part of Profile / See Also

Transferrin saturation

## Request Form

Combined Pathology manual Blood form or ICE request

## Availability / Frequency of Analysis

On request, if specific criteria are met.

## Turnaround Time

Same day

## Patient Preparation

None required

## Sample Requirements

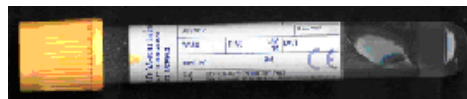
### Specimen Type

Serum and plasma

### Volume

1 ml

### Acceptable Containers



Yellow top (SST) tube



Green top (lithium-heparin) tube



paediatric orange top (lithium-heparin)



paediatric green top (lithium-heparin)

Plain serum samples may also be used.

## Reference Range & Units

 10 - 30  $\mu\text{mol/L}$ 

 Reference: Pathology Harmony Group, Clinical Biochemistry Outcomes, January 2011 ([www.pathologyharmony.co.uk](http://www.pathologyharmony.co.uk))

## Interferences

## Interpretation & Clinical

## Decision Value (if applicable)

 Critical phoning limit  $>55 \mu\text{mol/L}$  (except in known cases of haemochromatosis)

**References**

Sherwood RA, Pippard MJ, Peters TJ. Iron homeostasis and the assessment of iron status. *Ann Clin Biochem* 1998; 35: 693-708.  
Beckman kit insert.

**Test code**

IRON. TRAN (used in calculation of transferrin % saturation)

**Lab Handling**

Analysed from primary tube and stored at 4°C.  
Serum and plasma stable for 3 weeks at 2-8°C.  
Serum and plasma stable for 7 days at 15-25°C.