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| Ferritin |
| **Synonyms** |  |  |
| **Clinical Indication** |  | Ferritin measurements are used:1. to diagnose iron deficiency2. in the differential diagnosis of anaemia, including iron deficiency anaemia3. to monitor the response to iron therapy4. to monitor iron mobilisation therapy5. to aid in the diagnosis of iron overload, including the genetic conditionhereditary haemochromatosis (HH).Iron is normally stored in the body as ferritin, a small fraction of whichcirculates in blood. The concentration of serum ferritin is directly related totissue stores and levels vary depending on age and sex. Ferritin is generallymore accurate than iron and TIBC (transferrin) for the assessment of ironstatus. Unfortunately, serum ferritin is raised in acute and chronic disorderssuch as liver disease, inflammation or malignancy which limits its use as adiagnostic test for iron deficiency. Serum ferritin is increased in patients withhaemochromatosis. |
| **Part of Profile / See Also** |  | Haematinics |
| **Request Form** |  | Combined Pathology manual Blood form or ICE request |
| **Availability / Frequency of Analysis** |  | On request. Minimum retesting interval is 3 months. |
| **Turnaround Time** |  | Same day |
| **Patient Preparation** |  | None |
| **Sample Requirements** |  |  |
| **Specimen Type** |  | Serum |
| **Volume** |  | 1 ml |
| **Container** |  | Yellow top (SST) tube |
| **Reference Range & Units** |  | Adults: 15 - 300 ng/mL; Levels may be lower in menstruating women;following the menopause levels progressively approach quoted referencerange. |
| **Interferences** |  | Recent transfusion may give a false ferritin result. Grossly haemolysed samples should not be analysed. |
| **Interpretation & Clinical** **Decision Value (if applicable)** |  | Decreased levels indicate iron deficiency. Levels of up to 100 ng/mL may befound in patients with iron deficiency when this co-exists with inflammation,liver disease or malignancy (acute phase response) as these disorders increaseferritin above basal levels. Increased levels occur with iron overload(haemochromatosis and haemosiderosis) but transferrin saturation is a betterscreening test for these disorders. See interpretation of results of iron studies.Erroneous findings may be obtained with samples taken from patients whohave been treated with monoclonal mouse antibodies or have received themfor diagnostic purposes. This can also occur in patients who are routinelyexposed to animals or animal serum products. |
| **References** |  | Beckman kit insert |
| **Test code** |  | FERR |
| **Lab Handling** |  | Analysed from primary tube and stored at 4°C. |