

Datasheet for ABIN1326844

Ferritin ELISA Kit

2 Publications



Overview

Quantity:	96 tests
Target:	Ferritin (FE)
Reactivity:	Human
Method Type:	Sandwich ELISA
Application:	ELISA

Application:	ELISA
Product Details	
Purpose:	The Ferritin blood test is a solid phase direct sandwich ELISA method. The samples and diluted anti-Ferritin-HRP conjugate are added to the wells coated with Mab to Ferritin. Ferritin in the patient's serum binds to anti-Ferritin MAb on the wells. Unbound protein is washed off by wash buffer. The anti-ferritin-HRP conjugated detection antibody is added and then binds to ferritin. Unbound HRP conjugate is washed off by wash buffer. Upon the addition of the substrate, the intensity of color is proportional to the concentration of Ferritin in the samples. A standard curve is prepared relating color intensity to the concentration of the Ferritin.
Sample Type:	Blood, Serum
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Target Details	
Target:	Ferritin (FE)
Alternative Name:	Ferritin (FE Products)

Target Details

Background:

Human Ferritin has a molecular weight of approximately 450,000 Daltons, and consists of a protein shell around an iron core each molecule of Ferritin may contain as many as 4,000 iron atoms. Under normal conditions, this may represent 25% of the Total iron found in the body. In addition, Ferrritin can be found in several isomers. High concentrations of Ferritin are found in the cytoplasm of the reticuloendothelial system, the liver, spleen and bone marrow. Methods previously used to measure iron in such tissues are invasive, cause patient trauma and lack adequate sensitivity. The measurement of Ferritin in serum through a Ferritin Blood Test is useful in determining changes in body iron storage, and is non-invasive with relatively little patient discomfort. Serum Ferritin levels can be measured routinely with a Ferritin test and are particularly useful in the early detection of iron-deficiency anemia in apparently healthy people. Serum Ferritin measurements are also clinically significant in the monitoring of the iron status of pregnant women, blood donors, and renal dialysis patients. High Ferritin levels may indicate iron overload without apparent liver damage, as may be noted in the early stages of idiopathic hemochromatosis. Ferritin levels in serum have also been used to evaluate clinical conditions not related to iron storage, including inflammation, chronic liver disease, and malignancy.

Pathways:

Transition Metal Ion Homeostasis

Application Details

Restrictions:

Plate:

For Research Use only

Pre-coated

Handling

Storage:

4°C

Publications

Product cited in:

Khambalia, Collins, Roberts, Morris, Powell, Tasevski, Nassar: "High maternal serum ferritin in early pregnancy and risk of spontaneous preterm birth." in: **The British journal of nutrition**, pp. 1-7, (2015) (PubMed).

Winner, Sharkey-Toppen, Zhang, Pennell, Simonetti, Zweier, Vaccaro, Raman: "Iron and noncontrast magnetic resonance T2* as a marker of intraplaque iron in human atherosclerosis.

"in: Journal of vascular surgery, Vol. 61, Issue 6, pp. 1556-64, (2015) (PubMed).