

Ferritin

"Ferritin" is a storage protein containing iron, which is found mainly in the liver, spleen, bone marrow and intestinal mucosa. A small proportion is released into the bloodstream. The level of ferritin in the blood serum reflects the tissue stores of iron. Its value decreases before the level of transferrin increases. [1]

It is a complex consisting of the protein apoferritin and the ferric iron Fe^{3+} . [2]

Normal values of ferritin

- Males: 22 - 322 $\mu\text{g} / \text{l}$
- Women: 10 - 291 $\mu\text{g} / \text{l}$ [3]

High Iron level

- Hemochromatosis,
- Wilson's disease,
- Blood transfusion,
- Excessive iron intake in the diet,
- Porphyria cutanea tarda,
- Ineffective erythropoiesis (sideroblastic anemia, thalassemia).

Inflammation

Ferritin is one of the acute phase reactants

- Rheumatoid arthritis,
- SLE,
- non-specific intestinal inflammation,
- bacterial infections;

Liver disease

Ferritin is stored mainly in hepatocytes, when they are damaged it is released into the blood.

- liver steatosis (NASH),
- viral hepatitis B, C;

Other causes

Obesity, alcohol abuse, thyrotoxicosis and malignancies, especially haematological [4] Rarely, extremely high levels of ferritin can be a symptom of histiocytosis or Still's disease. [5]

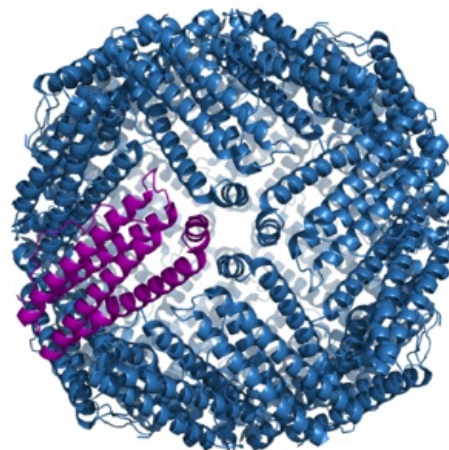
Links

External links

- Ferritin (česká wikipedie)
- Iron Storage: Ferritin (YouTube) (<https://www.youtube.com/watch?v=NvNINrte39g>)

References

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2. ŠVÍGLEROVÁ, Jitka. *Ferritin* [online]. The last revision 2009-02-18, [cit. 2010-11-13]. <<https://web.archive.org/web/20160416225121/http://wiki.lfp-studium.cz/index.php/Ferritin>>.
3. VOKURKA, Martin. *Great Medical Dictionary*. 10. edition. Maxdorf, 2015. ISBN 9788073454562.
4. BERKHAN, L. Interpretation of an elevated serum ferritin. *nzfp* [online]. 2002, vol. 29, p. 45-48, Available from <<http://www.rnzcgp.org.nz/AsiCommon/Controls/Shared/FormsAuthentication/Login.aspx?ReturnUrl=%2fassets%2fdocuments%2fPublications%2fArchive-NZFP%2fFeb-2002-NZFP-Vol-29-No -1%2fberkhan.pdf>>.
5. ADAMS, Paul. Management of Elevated Serum Ferritin Levels. *Gastroenterology and hepatology* [online]. -



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