

# Hematin

**Hematin** is a black-brown pigment. It is formed by the oxidation of iron in heme ( $\text{Fe}^{\text{II}} \rightarrow \text{Fe}^{\text{III}}$ ). Iron is hydroxylated in the porphyrin ring. Hematin is a low-molecular compound, unlike the protein hemosiderin, which resembles it in color. Both substances can be distinguished using the Perls reaction, which is negative for hematin.

Hematin is found, for example, at the base of stomach ulcers, where heme iron is oxidized under the influence of acidic HCl. Another example is the discoloration of dry gangrene.

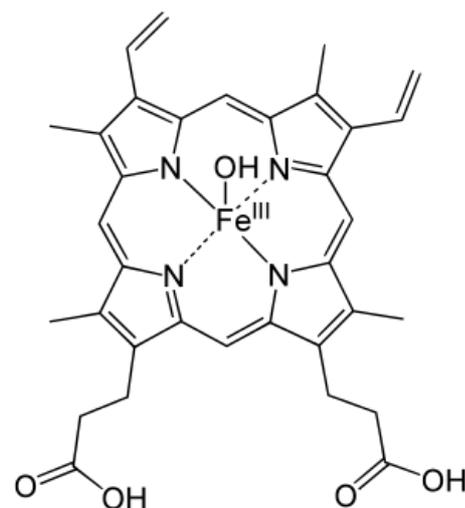


Hematin-stained gangrene

## Links

## References

ZÁMEČNÍK, Josef. *Patologie*. 1. edition. LD Prager Publishing, 2019. ISBN 9788027064571.



The structure of hematin