# WikiLectures:Causes of pathological conformation of proteins

## 5-Aminolevulinic acid

> It is formed by the condensation of glycine and succinite (succinyl-CoA) via the intermediate adipate (2-amino-3-oxo-1,6-hexanedioic acid), which is subsequently decarboxylated (removes $CO_2$ ) to form 5-aminolevulinic acid.

The reaction is catalyzed by aminolevulate synthase (ALA-synthase, ALAS), located in the mitochondrial matrix. Pyridoxal-5-phosphate acts as a cofactor, forming a temporary Schiff base with glycine. Enzyme activity is sensitive to vitamine $B_6$ deficiency. The product of this reaction is the starting precoursor of **heme**.

## Odkazy

### Související články

- Hemoglobin

### Použitá literatura


- *Incomplete citation of publication.* MATOUŠ, Bohuslav. *Základy lekárskej chemie a biochemie.* Praha : Galen, 2010. ISBN 978-80-7262-702-8.