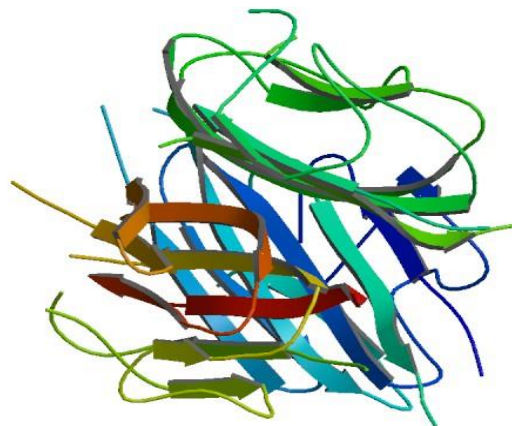


# Quantification of Adiponectin in Dried Blood Spots using ELISA

Adiponectin is a protein hormone that modulates a number of metabolic processes including glucose regulation and fatty acid oxidation. Adiponectin is exclusively secreted from adipose tissue (and also from the placenta in pregnancy) into the bloodstream, and is very abundant in plasma relative to many hormones. The hormone plays a role in the suppression of the metabolic derangements that may result in type 2 diabetes, obesity, atherosclerosis, non-alcoholic fatty liver disease (NAFLD) and an independent risk factor for metabolic syndrome.

The hormone circulates in human blood in the concentration range 2-40  $\mu\text{g}/\text{ml}$  depending on BMI and sex. Low adiponectin concentration increases the risk of type 2 diabetes.

Vitas AM-259 quantifies Adiponectin in dried blood spots (DBS) using a sandwich immuno assay technique.

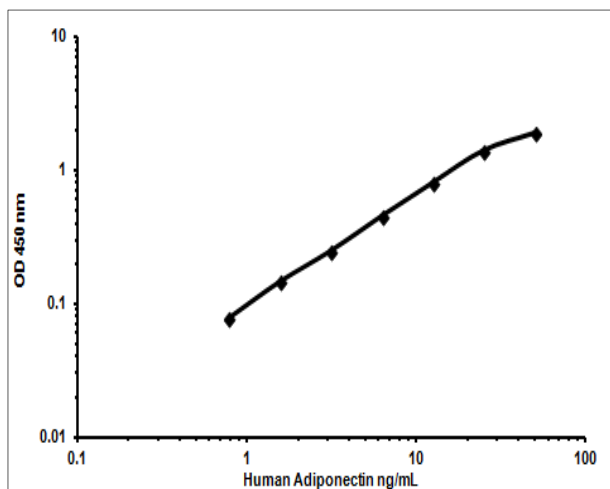


*Structure of Adiponectin, that is a 244 amino acid long polypeptide.*

## **Method details:**

- Technique: ELISA
- Sample Matrix: fasting Dried Blood Spot
- Species: human
- Sample amount: 50  $\mu\text{g}$ /one drop
- Range: 0.781-50  $\mu\text{g}/\text{ml}$
- Detection Limit: 0.7  $\mu\text{g}/\text{ml}$
- Quantification limit: 0.7  $\mu\text{g}/\text{ml}$
- Intra-day precision: 4.3  $\mu\text{g}/\text{ml}$
- Inter-day precision: 7.2  $\mu\text{g}/\text{ml}$
- Shipping temp: ambient, dry ice

*Standard curve of Adiponectin using ELISA.*



Vitas is a Norwegian GMP certified chemical analysis contract lab, with 20 years experience in providing a high quality, custom chromatographic analytical service based on cutting-edge knowledge and technology.