

Ketone Body Content Assay kit

Ketone bodies are intermediate products of fatty acid oxidative decomposition in liver. It includes Acetoacetic acid (AcAc) and beta-Hydroxybutyric acid (BOH) and acetone. The amount of acetone in ketone body is very small, and it is absorbed immediately. AcAc and BOH is oxidized in extrahepatic tissue through blood flow. The citric acid cycle provides more energy for those tissues, such as bone, myocardium and renal cortex. At pH 7.0 and 37°C, beta-Hydroxybutyrate dehydrogenase (HBDH) catalyzes the dehydrogenation of BOH to produce phthalic acid, and NAD⁺ is reduced to NADH. At pH 8.8 and 37°C, HBDH reduced AcAc to 3-hydroxy butyrate or decarboxylated to acetone, and NADH was oxidized to NAD⁺. NADPH has a characteristic absorption peak at 340nm. The content of BOH and AcAc can be calculated by detecting the change of absorbance at 340nm. Then the content of ketone body in the sample can be calculated.

Catalog No.	250506
Size	50 Assays / 100 Assays
Product Category	Colorimetric Assay
Detection Method	Spectrophotometry / Micro-Plate Reader
Storage/Stability	-20°C/6 months
Shipping	Gel Packs