

Acetoacetate Content Assay kit

Acetoacetic acid (AcAc) is one of the important components of ketone body. It is about 20% of the total ketone body in normal people. It is a strong organic acid produced by oxidation of fatty acids. Normal content of acetoacetic acid is harmless to human body. In diabetic patients, the amount of acetoacetic acid is accumulated due to the decrease of carbohydrate use or starvation due to the metabolic disorder of sugar. Acetoacetic acid can be converted into acetone as well as acetone beta-Hydroxybutyric acid. At pH 7.0 and 37°C, beta-Hydroxybutyrate dehydrogenase (HBDH) reduced AcAc to 3-hydroxybutyrate or decarboxylated to acetone, and NADH was oxidized to NAD⁺. In the presence of 1-mPMS, WST-1 can react with NADH to produce water-soluble formazan with a characteristic absorption peak at 450nm. The content of AcAc can be calculated by detecting the wavelength change at 450nm.

Catalog No.	250507
Size	50 Assays / 100 Assays
Product Category	Colorimetric Assay
Detection Method	Spectrophotometry / Micro-Plate Reader
Storage/Stability	-20°C/6 months
Shipping	Gel Packs