

AUTOKIT TOTAL KETONE BODIES | Cyclic Enzymatic Method

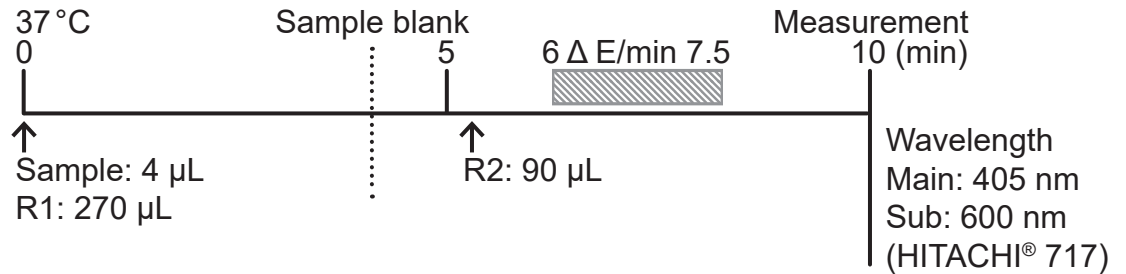
For the quantitative determination of Total Ketone Bodies in serum or plasma

- Pediatric disorders of metabolism
- Monitoring of liver transplants
- Also used for veterinary purposes
- Enzymatic colorimetric test
- Applicable to clinical chemistry analyzers

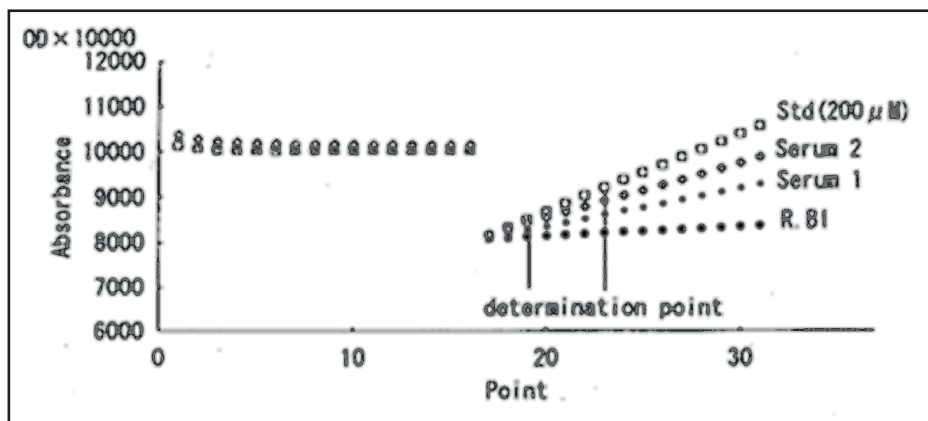
Principle

Acetoacetate (AcAc) and 3-Hydroxybutyrate (3-HB) in the sample are converted to 3-HB and AcAc, respectively, in the presence of 3-hydroxybutyrate dehydrogenase (3-HBDH), NADH and Thio-NAD. 3-HB and AcAc produced in the enzymatic reactions are converted to AcAc and 3-HB subsequently. During these cyclic reactions, NAD and Thio-NADH are produced. By measuring the rate of Thio-NADH production spectrophotometrically, T-KB in the sample is determined.

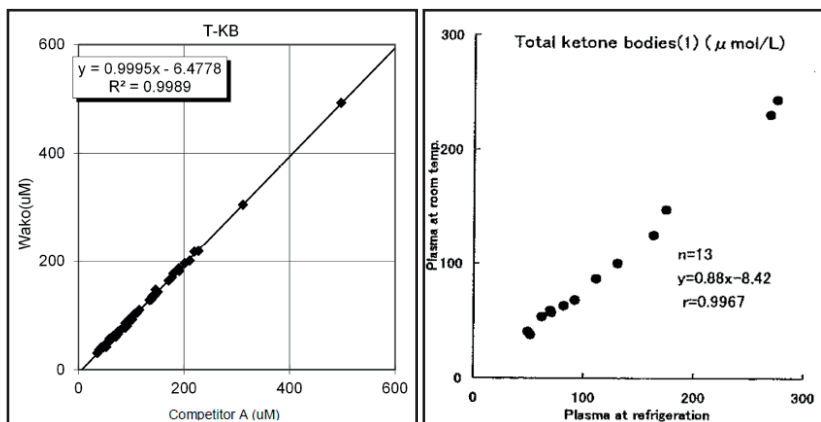
Procedure



Reaction



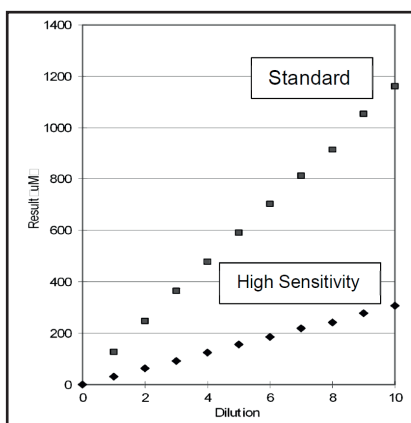
Correlation



Range

Standard method: 3 – 1000 µmol/L
High sensitivity method: 0.2 – 200 µmol/L

Linearity



Interference

Ascorbic acid and bilirubin do not have a significant effect on the assay. Interfering substances heparin, citrate, oxalate, EDTA and sodium fluoride do not affect the measurements when they are used in their respective usual quantities.

CE Applications Hitachi 911

Hitachi 912

Ordering

Code No.	Product	Content
415-73301	Autokit Total T-KB, R1 Set	R1a: 2 x 27 mL R1b: 2 x for 27 mL
413-73601	Autokit 3-HB R2 Set (3-HB and T-KB)	R2a: 2 x 9 mL R2b: 2 x for 9 mL
412-73791	Ketone Body Calibrator 300	CAL: 4 x 5 mL