

AUTOKIT 3-HB | Cyclic Enzymatic Method

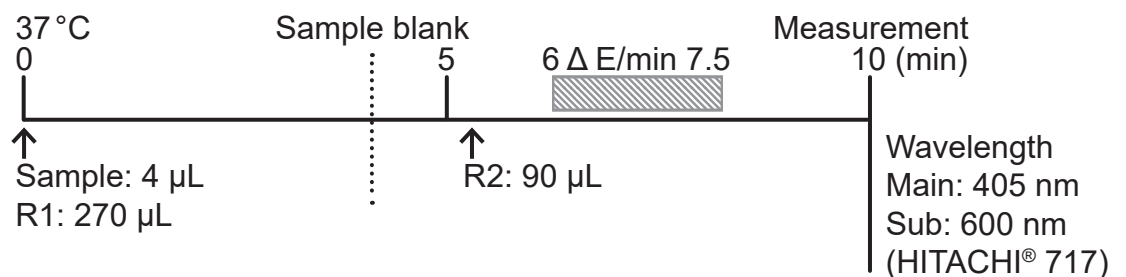
For the quantitative determination of 3-Hydroxybutyrate in serum or plasma

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

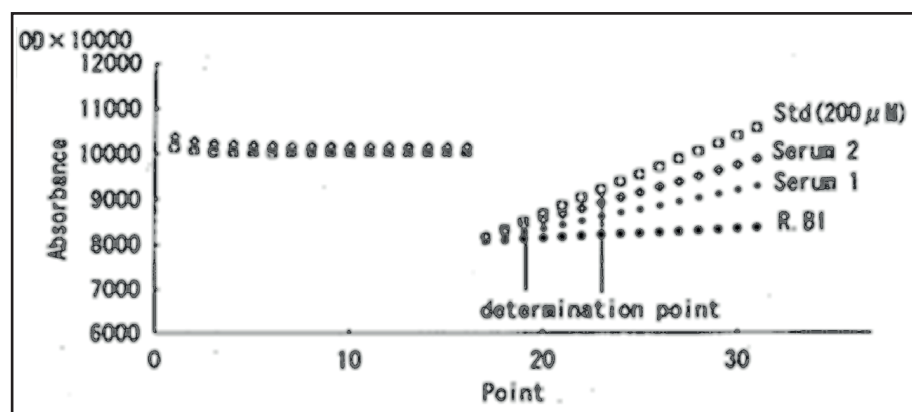
Principle

Acetoacetate (AcAc) in the sample is broken down to Acetone by AADC upon addition of R2, 3-Hydroxybutyrate (3-HB) in the sample is oxidized in presence of 3-HBDH and Thio-NAD. This oxidation triggers the cyclic reactions. Since the original AcAc in the sample has been removed, only 3-HB is assayed by measuring the rate of Thio-NADH production spectrophotometrically.

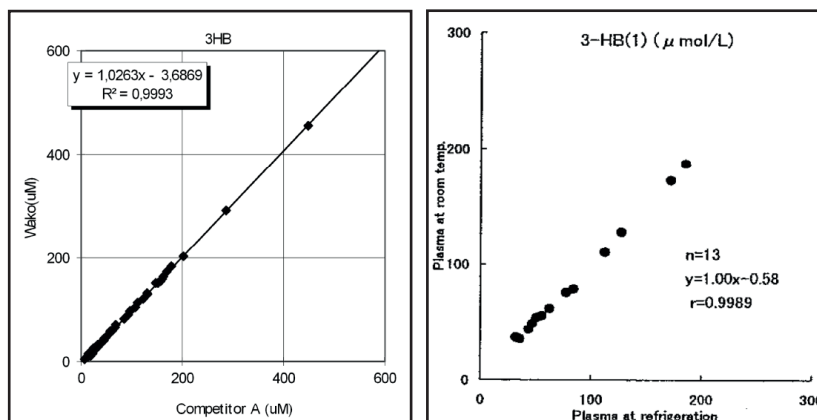
Procedure



Reaction



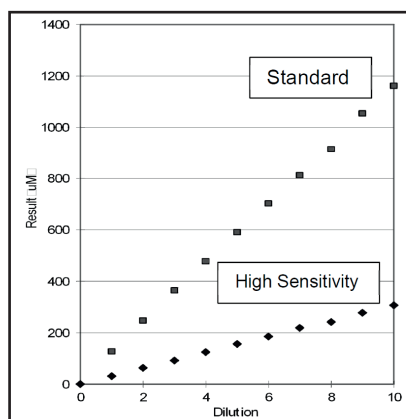
Correlation



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
417-73501	Autokit 3-HB, 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