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Working

## Yale - Beta hydroxybutyrate (Cobas) [↗](#)

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[dx.doi.org/10.17504/protocols.io.y2bfyan](https://doi.org/10.17504/protocols.io.y2bfyan)

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### ABSTRACT

#### Summary:

Procedure used to determine the concentration of  $\beta$ -Hydroxybutyrate in blood, serum, and plasma.  $\beta$ -Hydroxybutyrate is measured by the oxidation to acetoacetate, followed by reduction of an indicator dye (monitored at 505 nm) by NADH.

### EXTERNAL LINK

<https://mmpc.org/shared/document.aspx?id=215&docType=Protocol>

### MATERIALS

NAME	CATALOG #	VENDOR
$\beta$ -Hydroxybutyrate Controls	H7587-CTL	Pointe Scientific Inc.
$\beta$ -Hydroxybutyrate Reagent (test kit includes standard).	H7587-58	Pointe Scientific Inc.

### MATERIALS TEXT

#### Reagent Preparation:

$\beta$ -Hydroxybutyrate Controls: As supplied by vendor

$\beta$ -Hydroxybutyrate Reagent and Standard: As supplied by vendor

### BEFORE STARTING

*Analysis by automated system Cobas Mira Plus.*

- 1 Calibrate Cobas for  $\beta$ -Hydroxybutyrate by running a  $\beta$ -Hydroxybutyrate standard and three  $\beta$ -Hydroxybutyrate controls.
- 2 Sample handling as performed by the Cobas Mira Plus.
  - a) Pipette 3  $\mu$ L of sample into cuvette.
  - b) Add 105  $\mu$ L of  $\beta$ -Hydroxybutyrate Reagent.
  - c) Mixture is incubated at 37°C for 10 minutes.
  - d) Absorbance is measured at 505 nm.



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