β-Hydroxybutyrate

Version: 1
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Summary: Procedure used to determine the concentration of β-Hydroxybutyrate in blood, serum, and plasma. β-Hydroxybutyrate is measured by the oxidation to acetoacetate, followed by reduction of an indicator dye (monitored at 505 nm) by NADH.

Reagents and Materials:

Reagent/Material	Vendor	Stock Number
ß-Hydroxybutyrate Controls	Pointe Scientific Inc.	H7587-CTL
ß-Hydroxybutyrate Reagent (test kit includes standard).	Pointe Scientific Inc.	H7587-58

Protocol: Analysis by automated system Cobas Mira Plus.

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

Reagent Preparation:

ß-Hydroxybutyrate Controls: As supplied by vendor

ß-Hydroxybutyrate Reagent and Standard: As supplied by vendor