

**Order information**

Ref. No.	Size
2440-058, BOHB Kit	R1 1 x 50 mL + R2 1 x 8.5 mL Std. 1 x 3 mL
2460-605, Tri-level Controls	6 x 5 mL
2465-605, Bi-level Controls	6 x 5 mL
2450-604, Linearity Standards	6 x 4 mL

**Method**

$\beta$ -Hydroxybutyrate (D-3-hydroxybutyrate) in the presence of NAD is converted to acetoacetate and NADH at pH 8.5 by  $\beta$ -Hydroxybutyrate dehydrogenase (D-3-hydroxybutyrate dehydrogenase). At this pH the reaction is favored to the right. The NADH produced is converted to color using INT and diaphorase.

**Reagent Preparation and Stability**

The reagents are ready-to-use and stable up to the end of the indicated month of expiry, if contamination is avoided and stored at 2 – 8 °C. The reagent 2 must be protected from light.

Use Reagent A as R1 and Reagent B as R2.

**Specimen**

Serum, heparinized, sodium fluoride or EDTA plasma. Avoid hemolysis! Stable at least one week if kept at 2 - 8 °C

**Components and concentration in the test**

- R1:** Reagent A - Enzyme  
 $\beta$ -Hydroxybutyrate  
Dehydrogenase  
Diaphorase
- R2:** Reagent B – Catalyst  
NAD  
INT  
Oxalate

**Notes**

1. The reagents contain Sodium Azide (0.095 %) as preservative. Do not swallow! Avoid contact with skin and mucous membranes!

**Normal Range**

Adults 0.10 – 0.27 mmol/L  
Conversion:  
mg/dL = mmol/L x 10.4

**\*Customers should be aware that this protocol has been generated by a user of our assay on a Cobas Integra 800 analyzer and has not been validated by Stanbio Laboratory or the instrument manufacturer.**

# Cobas Integra 800

GENERAL		
Test:	Test ID:	8-634
	Short Name:	BOHB
	Long Name:	β-Hydroxybutyrate
	Test No.:	634
	Version No.	87A.00
	General Test Class:	Substrate
	Default Sample Type:	Serum
	Measurement Mode:	ABS
	Clot Detection:	Enabled
CALIBRATION		
Calibrator Editor:	Selected Calibrator:	User Defined (87-6341-0)
	Short Name:	BOHST
	Long Name:	BOHB Standard
	Version No.:	87A.00
Calibrator Definitions:	No. of Standards	2
	Replicate:	Duplicate
	Sequence:	Cassette & Interval days: 0
	BOD Action:	Test Requested
DILUENT		
	Selected Pre-Diluent:	None
	Selected Diluent:	None
PIPETTING		
Sample and Control Definitions:	Pre-dilution:	Disabled
Pipetting Parameter	Reaction Mode:	R1-S-SR
	Pipetting Depth:	Normal
Pipetting Volumes	S: Specimen:	4.00 µL Water: 5.00 µL
	R1: Reagent:	150 µL Water: 5.00 µL
	SR: Reagent:	25 µL Water: 5.00 µL
CASSETTE		
Cassette	Cassette ID:	87-6340-0
	Short Name:	BOHB
	Long Name:	β-Hydroxybutyrate
	Version:	87A.00
Development channel COBAS c pack	No. of Tests:	150
	Container B:	Empty - Volume (mL): 0.00
	Container A:	R1 - Volume (mL): 25.85
	Container C:	R2 - Volume (mL): 6.39
Mixing	By BOD:	Enabled-Mix Time: 1 minute
On-board Stability	On-board Stability:	Enabled - Time to use: 30 days
CALCULATION		
General	ABS Calculation Model:	Endpoint
	Wavelength L 1:	512 nm
	Wavelength L2:	800 nm
	Reaction Direction:	Increase
	Calculation Point First:	50
	Calculation Point Last:	98
	Standard Unit:	mmol/L
Calibration:	Curve Direction Check:	Off
	Calculation Model:	Linear Regression
CHECKS		
Reagent Range:	Low Limit:	Disabled
	High Limit:	Disabled
Test Range:	Low Limit: 0.10	High Limit: 8.0
Endpoint:	Unstable Limit:	Disabled
	Replicate Deviation:	Disabled
	Activity:	None
	Antigen Excess:	Disabled
	Lin Req Curve Range:	Disabled