Stanbio Laboratory
β-Hydroxybutyrate LiquiColor®

Beckman Synchron® LX

Order information
Cat. No.   Kit size
2440-058   R1 1 x   50 mL + R2   1 x 8.5 mL
                                     Std.   1x   3 mL

2460-605   6 x   5 mL
Approximately 190 tests/kit

Method
β-Hydroxybutyrate (D-3-hydroxybutyrate) in the presence of NAD is converted to acetoacetate and NADH at pH 8.5 by β-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.
Pour Reagent 1 into compartment B and Reagent 2 into compartment C.

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 1 - Enzyme
        β-Hydroxybutyrate
        Dehydrogenase
        Diaphorase
R2:   Reagent 2 – 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   0.02 – 0.27 mmol/L

Instrument setting
Temperature : 37°C

Chemistry Parameters			
Test Name:	BHOB	User def. No:	#
Chem Name:	BHOB		
Reaction Type:	Endpoint 2		
Units:	mmol/L	No. of Calibrators:	2
Decimal:	2	Calibrator 1: 0.0	(H20)
Reaction Dir.:	Positive	Calibrator 2: 1.0	(Std.)
Calculation Factor:	1.0	Calibrator 3:	
Math Model:	Linear	Calibrator 4:	
Cal Time Limit:	336hr	Calibrator 5:	
		Calibrator 6:	
Pri. Wavelength:	520	Sec. Wavelength:	700
Reagent 1 [A]:		[C] Volume	40 µL
Reagent 2 [B]:	200 µL	Inject Time:	240 sec.
Sample Volume:	3 µL		
Reagent Blank:			
Start Read:	200 sec.	Reaction 1	
End Read:	220 sec.	Start Read:	540 sec.
Usable Range:	LL: 0.0	End read:	560 sec.
	UL: 8.0		
Error Detection Limits			
Reagent Blk L:	-1.500	Reaction Low:	-1.500
H:	2.200	High:	2.200
Substrate Depletion:			
Initial Rate:	99.999	Delta Abs.:	2.200
Multipoint Span	0.000		

#)   Data entry by the user

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