

Stanbio Laboratory

β-Hydroxybutyrate LiquiColor®

Preliminary*

Siemens Vista® 500/1500

Order information

Ref. No. Kit size
2440-058 R1 1 x 50 mL + R2 1 x 8.5 mL
Std. 1 x 3 mL
2460-605 6 x 5 mL

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.

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
β-Hydroxybutyrate
Dehydrogenase
Diaphorase
R2: Reagent B – Catalyst
NAD
INT
Oxalate

Notes

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

Normal Range

Adults 0.2 – 2.8 mg/dL

Conversion:

mmol/L = mg/dL x 0.096

User Defined Methods

Existing Methods: XBHB		Available Channels: #				
Method Name: xBHB	ID: #	Units: mg/dL	Mode: Photometric			
EXECUTION						
Delivery						
	<u>Time</u>	<u>Comp.1</u>	<u>Remix</u>	<u>Chase</u>	<u>Mix</u>	
D1	-21	R1: 100 µl	None	10 µl	None	
S1	0	S: 2.8 µl	-	2 µl	Gentle	
D2	82	R2: 15 µl	Moderate	7 µl	None	
D3	39	0 µl	None	0µl	None	
S2	662	0 µl	None	0 µl	None	
REAGENT						
	<u>Reagent</u>	<u>Tests</u>	<u>Life (hours)</u>	<u>Volume</u>	<u>On board</u>	
1	R1	10	120	1190	<u>Life (hrs)</u>	
2	R1	10	120	1190	300	
3	R1	10	120	1190		
4	Empty	0	0	0		
5	Empty	0	0	0		
6	Empty	0	0	0		
7	Empty	0	0	0		
8	Empty	0	0	0		
9	Empty	0	0	0		
10	Empty	0	0	0		
11	R2	30	300	632		
12	Empty	0		0		
CALCULATION						
Format: Rate	Measuring: 510	Blanking: 700				
P1 Time: 26	Dilution: 1.00	IOD: -				
P2 Time: 396	Dilution: 1.00	FOD: -				
		FOD: -				
		FOD: -				
Errors						
Check: -	Read 1: -21	Read 2: -21	Trigger: -			
CALIBRATION						
Std. Curve: LINEAR	Interval (days): 30					
Calibrator Levels: 3	Calibrator Dilutions					
<u>Level</u>	<u>Weight</u>	<u>Replicates</u>	<u>Create</u>	<u>Component</u>	<u>Dil.</u>	<u>Dil. Factor</u>
1	1.00	3	L1	L3	SDIL	10.0
2	1.00	3	L2	L3	SDIL	2.0
3	1.00	3		Minimum Aspiration: 400		
SAMPLE						
Serum	Low	High	Reference Range			
Assay Range	0	46	Low: 0.2	High: 2.81		
Plasma						
Assay Range	0	46	Low: 0.2	High: 2.81		
			-	-		

#) Data entry by the user

***Customers should be aware that this protocol has been generated by a users of our assay on a Vista 500/1500 analyzers and has not been validated by Stanbio Laboratory or the instrument manufacturer.**