

CK-MB FS*

Order information

Cat. No.	Kit size					
10 165 021	R1 5 x	20 ml +	R2 1 x	25 ml		
10 165 022	R1 5 x	80 ml +	R2 1 x	100 ml		
10 165 023	R1 1 x	800 ml +	R2 1 x	200 ml		

Method

Optimized UV test according to the recommendations of the DGKC (German Society of Clinical Chemistry) and IFCC (International Federation of Clinical Chemistry) for CK-NAC. The CK-MB consists of the subunits CK-M and CK-B. A specific antibody against CK-M inhibits the complete CK-MM activity (main part of the total CK activity) and the CK-M subunit of CK-MB. Only CK-B activity is measured, which is half of the CK-MB activity.

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, stored at 2 – 8 °C and protected from light.

Specimen

Serum, heparinized or EDTA plasma. Avoid hemolysis!
 Loss of activity: at 2 – 8 °C after 24 h ≤ 10 %
 at 15 - 25 °C after 1 h ≤ 10 %.

Components and concentration in the test

R1 + R2

Imidazole	pH 6.7	100 mmol/l
Creatine Phosphate		30 mmol/l
Glucose		20 mmol/l
N-Acetyl Cysteine		20 mmol/l
Magnesium Acetate		10 mmol/l
EDTA		2 mmol/l
ADP		2 mmol/l
NADP		2 mmol/l
AMP		5 mmol/l
Diadenosine Pentaphosphate		10 µmol/l
Glucose-6-phosphate Dehydrogenase		≥ 1.5 KU/l
Hexokinase		≥ 2.5 KU/l
CK-M (human) inhibiting polyclonal antibodies (sheep) inhibiting capacity		≥ 2000 U/l

Notes

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

Normal range (see reference 3)

The likelihood of a cardiac infarction is high under the following circumstances:

CK Women	37 °C > 167 U/l
CK Men	> 190 U/l
and	
CK-MB	37 °C > 24 U/l
and	
A CK-MB activity between 6 and 25 % of the Total CK activity	

If a cardiac infarction is suspected but the above conditions are not fulfilled, a fresh infarction may have occurred. The determination should then be repeated with a fresh sample after 4 hours.

References

- Würzburg, U., et al., Klin. Wschr., 54, (1976), 357 – 360
- Würzburg, U., et al., J. Clin. Chem. Clin. Biochem., 15, (1977), 131
- Stein, W., Med. Welt., (1985), 572 - 577

* fluid stable

HITACHI 917 Chemistry parameters

Analysis		CKMB				Ser/Pl			
Test / Type		Rate A	A	10	A	23	34	0	0
Assay / Time / Point		415	A	340	A				
Wave (2 nd /Primary)		8	0	0					
S.Vol (Normal)		2	0	0					
S.Vol (Decrease)		16	0	0					
S.Vol (Increase)		00951	99						
Diluent		160	0	#	60				Timing
Reagent (R1) T1		0	0	#	0				R1
Reagent (R2) T2		40	0	#	60				R2
Reagent (R3) T3		0	0	#	0				R3
Reagent (R4) T4		9000		Increase	A				
Abs. Limit		32000	0	Lower	A				
Prozone Limit		Detergent 1		A					
Cell Detergent									

Calibration	
Calibration type	Linear A A
Point	2 Span Point 2
Weight	0
Autocalibration	
Blank	Blank A
Span	Blank A
2Point	
Full	
SD Limit	0.1
Duplicate limit	10 % 200 Abs
Sensitivity limit	-99999 999999
S1 Abs limit	-32000 32000

Range	
Application Code	# Unit U/l A
Report Name	CK-MB
Data Mode	On Board A
Control Interval	1000
Instrument Factor (Y=aX+b)	a= 1.0 b= 0.0
Technical Limit	0 1000
Repeat Limit	0 1000
Expected Value	
(Male)	Y A 0 24
(Female)	Y A
(Default)	Male A Range3 A
Qualitative	
	Cancel A
(1)	0
(2)	0
(3)	0
(4)	0
(5)	0
(6)	0

Others	
<Standard>	(1) (2) (3) (4) (5) (6)
Calib. Code	501 #
Concentration	0 *
Position	
Sample Volume	8 8
Diluent S.Vol	0 0
Diluent Volume	0 0

#) Data entry by the user

*) Enter calibration or standard value