



CK -MB KIT

PRINCIPLE:

This procedure involves measurement of Creatinine Kinase (CK) activity in the presence of an antibody to Ck-M monomer. This antibody completely inhibits the activity of CK-MM and half of the activity of CK-MB while not affecting the B subunit activity of CK-MB and CK-BB.

CONTENTS & STABILITY:

1. Reagent R1 : Ready - To - Use
2. Reagent R2 : Ready - To - Use

The Reagents are ready - To - Use and are stable upto Expiry mentioned on the label.

REAGENT PREPARATION:

Mix 4 parts of R1 + 1 part of R2. The combined Reagent is stable for 2 weeks at 2^o - 8^o C. Protect from direct light

SPECIMEN:

Serum is the sample of choice. Loss of activity at 25^o C after 1 hour is 10%.

PROCEDURE:

Equilibrate the reagent tubes at 37^o C before addition of sample.

ASSAY PARAMETER:

Mode	: Kinetic.
Wave Length	: 340nm.
Cuvette	: 1cm path length.
Reaction Slope	: Increasing.
Incubation Temperature:	37 ^o C.
Blank	: Water Blank.
Reagents Volume	: 1000 ul.
Sample Volume	: 50 ul.
Delay time	: 300 sec.
Reaction time	: 120 sec.
Interval time	: 60
Factor	: 6752
Linearity	: 1500 U/L.
Units	: U/L.

MANUAL ASSAY:

Pipette into cuvettes	Macro (ul)	Semi-Micro (ul)
Reagent (R1 + R2)	800+200	400+100
Sample	50	25

Mix and after 300 second incubation, measure the change in absorbance every minute during 2 mins at 37 deg C. Calculate the mean absorbance per minute (A/min.)

NORMAL VALUES: 0 - 24 U/L

CLINICAL SIGNIFICANCE:

CK-MB levels increases significantly 4-6 hours following a myocardial infarction & Peak at around 12 to 24 hours after the infarct. The levels return to normal in case of no further myocardial damage after 24 - 48 hrs. Hence the increased level of CK-MB along with elevated levels of CK-NAC is a good indicator of myocardial infarction.

REFERENCES:

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2. Long, H., Wurzburg, U., Clin. Chem., 1439, (1982).
3. Stein, W., Medwelt, 36, (1985), 572-577.