CURRENT

Category: Biochemistry
Title: Estimation of Creatinine on minichem ARK diagnostic using serum samples
SOP No.: Biochemistry05/01
Date first effective: 01st January2025 **Review date:** 31st December 2025
Department of Clinical Pharmacology, 1st Floor, New MS Building,
Seth GS Medical College & KEM Hospital, Parel, Mumbai 400012

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Title: Estimation of creatinine in serum samples of patients and normal, healthy Volunteers on minichem ARK diagnostic

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1. Purpose

The purpose of this Standard Operating Procedure (SOP) is to outline the procedure for estimation of creatinine on minichem ARK Diagnostics semi automated machine in the Biochemistry lab of Department of Clinical Pharmacology.

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2. Scope

This SOP covers the procedure of estimation of creatinine on minichem ARK Diagnostics semi automated machine using serum.

3. Responsibility

Lab technician, Lab attendant, or any other appropriately qualified staff in the team, designated by the Head of Department, will be responsible for analysis.

4. Reference

- Departmental SOP no 10/05: Blood collection.
- Departmental SOP no 24/04: Waste management.
- Biochemistry labs SOP no 1/01: Analysis using minichem ARK diagnostic instrument.
- Kit inserts

5. Detailed Instructions

1. The whole blood sample is collected and processed as per SOP no. 10/05.
2. Remove the QCA reagent kit kept in the **Refrigerator**[between 2-8 degree Celsius] located in the main Biochemistry laboratory of Department of Clinical Pharmacology, M.S. Building, 1st Floor. Verify the expiry date before using the kit.
3. **Use kit:** Spin react Jaffe's kinetic method Creatinine Kit,

4. As per SOP no. 10/03 for Biochemistry analysis on minichem ARK Diagnostics, select the parameter 'CREATININE' and set the machine for measurement of the sample.
5. As per the reagent kit insert, to 50 µl of the sample add 250µl of reagent 1 and 250µl of reagent 2.
6. After addition of the reagents, immediately aspirate the test solution through the sipping tube by pressing the button behind the tube.
7. The machine will give a beep sound and will continue with the measurement of the concentration for a period of 120 seconds.
8. After the delay time of 120 seconds, the machine will beep and will display the absorbance followed by the reading.
9. Values are entered in the report, evaluated and signed by the biochemist/laboratory in charge and Study-coordinator and PI.
10. Once the Creatinine parameter is completed for all samples, aspirate distilled water for washing purpose.
11. After washing is completed, switch off the adaptor and then switch off the main switch.
12. Samples are discarded as per departmental SOP no. 24/02 (SOP of waste management).