

CURRENT

Category: General SOP for instruments in Genetics laboratory.

Title: Performing the horizontal gel electrophoresis in the Department of Clinical Pharmacology, K.E.M Hospital, Mumbai.

SOP No.: Post- PCR -01

Date first effective: 1st January 2025

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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Table of contents

No.	Contents	Page No.
1.	Purpose	3
2.	Scope	3
3.	Responsibilities	3
4.	References to other applicable SOPs	3
5.	Detailed Instructions	4-5

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Purpose: The purpose of this Standard Operating Procedure (SOP) is to describe the method for performing the Horizontal gel electrophoresis in the Department of Clinical Pharmacology (DCP), Seth GS Medical College and KEM Hospital, Mumbai.

Scope: This SOP is limited for performing the horizontal gel electrophoresis

Responsibilities:

Primary Responsibility: Divya Bhare
Lab Technician

Divya Bhare
30/Dec/2024

Secondary Responsibility: Dr. Sheetal Kudtarkar
Project Scientist

Sheetal Kudtarkar
30/12/24

References: Operational Manual

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Detailed Instructions:

Important: This procedure should be carried out wearing sterile gloves

1. Pour the gel in casting tray and allow it to solidify.
2. Arrange the horizontal gel electrophoresis tray by placing the comb at least 1cm above the surface of the tray. Now place the electrode plates according to the charge i.e. red plate (positive) opposite to the well and black plate (negative) near the wells.
3. Connect the electrodes to the power pack (voltage suppliers) with the help of connecting wires to the respective plates and close the tank with the lid.
4. After the gel has solidified, pour 1X TAE buffer on it (till the gel is completely covered by buffer) and wait for 10-15 mins.
5. Then remove the comb carefully such that wells should remain intact.
6. Place the solidified gel in the buffer tank.
7. Pour 1XTAE buffer in the tank such that all wells are immersed in it.
8. Load the sample in the well.
9. Now turn ON the voltage supplier.
10. Press Manual option key of power pack.
11. Now put 100V using the number keys.
12. Now press the RUN button.
13. Let the sample run till the bands reach at least 1/4th of the gel.

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14. Press STOP button to stop running gel.
15. Now remove the gel from the tank.
16. Place the gel in the gel documentation system and observe the bands. (Follow the SOP of Gel Documentation System)