Document Number: **SASoM/METHOD/027.v5**

Title: **'MicroVigene' Software: Platemaps**

Version: **v5**

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SOP History		
Number	Date	Reason for Change
V1	01/02/2013	Original
V2	1/02/2015	Update
V3	01/02/2017	Update
V4	01/02/2019	Update
V5	01/02/2021	Update

1.0 Purpose –

This SOP describes the current procedure for creating a 'Platemap' using the MicroVigene software in Laboratory 248 at the St Andrews School of Medicine (SASoM).

2.0 Scope –

This SOP applies to all staff in the SASoM using MicroVigene software.

3.0 Responsibilities –

All staff involved in creating a 'Platemap' using the MicroVigene software are responsible for ensuring that the methods are followed in accordance with this SOP.

All staff must have read and signed the relevant risk assessment documents before performing this procedure.

4.0 Procedure –

Launch the MicroVigene software, load an image, load a Template and then find the spots as previously described (see SOP SASoM/METHOD/026-28).

Go to Edit→Platemap in Plate Format.
Click on Create Layout icon.
Do NOT tick multiwell box.

Now think about how many samples / lysates / conditions you have, along with how they are arranged on the pad - this is nothing to do with dilutions, or whether samples are spotted in duplicate or triplicate etc. The samples may therefore be arranged as 10 columns and two rows (pins 1 & 2), giving a total of 20 possible samples. The formatting of the rows and columns in the Platemap MUST correspond to the Basic Grid template in MicroVigene. In this case the Template shows 2 x 2 ROIs x 5 columns on the grid = 20.

Sample Name: Each of the 20 boxes in the PlateMap template must be assigned a sample name. This can be automatically assigned (Samples 1-20) or can be inputted manually with specific conditions, doses etc. Click on the grey box above the letter 'A' to select all of the cells, and then right-click to show Auto Generate Name. Samples can be assigned horizontally or vertically according to choice.

Properties: Select all of the named cells and right-click for Properties. Assign parameters according to how samples have been spotted, ticking each box as detailed below:

- Control Type – sample
- Group ID – 1
- Initial Dilution – 100 (%)
- Dilution folder (dilution factor) – 2 (for two-fold dilutions)
- Dilution Serial – Columns (sample dilutions are arranged down a column)
- Replicate count – 3 (everything is spotted in triplicate)
- Buffer Spots – not included
- Spots Row – 18; Spots Column – 1
  (each specific LYSATE / SAMPLE) is arranged in 1 column of 18 rows!
- Apply Select
- Apply Layout

Clearly this will change according to the mapping on the slides. The Platemap can then be checked over by selecting the Name Tab, the Type tab, and the Dilution tab and confirming the information recorded.

If everything is correct, click on the floppy disc icon to 'Save Platemap to File'. Once the Platemap has been saved, it CANNOT be altered or amended in any way!!

Close the Platemap Window and go to Options→Basic tab→Platemap. Assign the new Platemap relevant to the spots / samples being analysed and then confirm by selecting Apply All→Save Template. This will assign the new Platemap to the Template it has been associated with.

Analysis can then be performed with the settings as described in the accompanying SOP for 'Dilution Curves'.

5.0 Personal protection –
A Howie coat must be worn at all times.

6.0 Spillages –
Always clean up any spills immediately after use, only you know what you have spilt and are aware of its hazard.

Spillages should be mopped up with paper towel, disinfected with 70% ethanol and finally washed with Teknon 100.

7.0 Training –
All staff should under go training in this technique before performing the procedure.

8.0 Related documents –

8.1 MicroVigene User's manual

8.2 SOP SASoM/METHOD/026
MicroVigene' Software: Analysis

8.3 SOP SASoM/METHOD/027
MicroVigene' Software: Platemaps

8.4 SOP SASoM/METHOD/028
MicroVigene' Software: Templates

9.0 Approval and sign off –

Author:

Name: Peter Mullen

Position: Research Fellow

Signature: Date:

Management Approval:

Name: Peter Mullen

Position: Research Fellow

Signature: Date:

QA release by:

Name: Alex MacLellan

Position: QA Manager

Signature: Date:

STANDARD OPERATING PROCEDURE

Please sign below to indicate you have read this S.O.P and understand the procedures involved.

NAME	POSITION HELD	SIGNATURE	DATE