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Title: Use and Maintenance of the Corbett Rota Gene

Version: v2

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SOP History		
Number	Date	Reason for Change
v1	01/01/2013	Original
V2	01/01/2018	Update

1.0 Purpose –

The purpose of this SOP is to outline the principles of the routine use and maintenance of the Corbett Rota Gene in Laboratory 248 at the St Andrews School of Medicine (SASoM).

2.0 Scope –

This SOP applies to routine use and maintenance of the Corbett Rota Gene within the SASoM.

3.0 Responsibilities –

It is the responsibility of all users of the Corbett Rota Gene within the SASoM to comply with this SOP.

4.0 Procedure –

Turn on the ROTOR GENE and attached PC.

Whilst the ROTOR GENE software is opening, load your samples into the ROTOR GENE (note that the layout of tubes is from A to I with 8 positions attached to each letter).

To load your samples, slide open the lid of the ROTOR GENE and remove the locking ring (which is then carefully replaced once the samples are loaded). Ensure caps are tightly on and that all blank spaces are filled with un-capped empty vials.



The standard rotor in use has capacity for 72 tubes- empty tubes should be used to fill any empty spaces. Note- these should not be capped.

Sample names can be easily edited on the ROTOR GENE program before or during a run.

Program the ROTOR GENE according to the desired PCR protocol. A typical protocol is as follows:

95°C, 15min; (94°C, 15s; 56°C, 30s; 72°C, 30s) x 50 cycles; 72°C, 5min.

There will also be a series of general options relating to the size of rotor used; the use of the locking ring and the selection of the wavelength (channel) to be used.

Normally fluorescence data is acquired at the end of the 72°C elongation step in each cycle. In this page the acquisition channel(s) are set by clicking on the 72°C segment of the cycling profile. Clicking on the ACQUIRING TO CYCLING A icon will display all the available channels.

Channels: For SYBR green either the SYBR, FAM/SYBR (or both) channels may be used.

Gain: This allows amplification of detected signal, a starting value of 7 – 9 is recommended.

Once ready, select START. At this point you will also be able to save your data file. It is possible to save data either onto the computer hard-drive or a network drive.

At the end of a run, remove specimens and switch the ROTOR GENE and computer off.

5.0 Personal protection -

Howie coat must be worn at all times.

Gloves should also be worn.

6.0 Spillages -

Spillages should not occur as only loaded and closed tubes are inserted into the machine.

7.0 General maintenance -

Keep the instrument clean. Avoid leaving specimens in the machine at the end of a run. Remember to switch off when not in use.

Clean surfaces of the apparatus with soft cloth and mild detergent.



8.0 Maintenance -

Regular service as recommended by recognised engineers.

9.0 Training -

All users have to be trained before using the Instrument by a designated person.

10.0 Related documents –

- 10.1 Equipment manual
- 10.2 Equipment Maintenance Log
- 10.3 Equipment Maintenance Information sheet
- 10.4 Risk assessments –
- 10.5 SOP BRU/INS/026
Programming the Corbett Rota Gene

11.0 Approval and sign off –

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