

THERMAL CYCLER Standard Operation Procedure (SOP)

BIORAD T100™

A. Before running your PCR:

1. Check the thermal cycler [booking sheet](#) & **book your time**.
Note: Usually PCR runs for 2-3 hours, hence in 1 day, there can only be 2 bookings (between 8 am - 5pm; suggested booking time 10 am - 1 pm, 1 pm - 4pm).
2. **Be on time**. Be in the laboratory at least 1-2 hours before your booking slot to ensure you will finish your PCR on time before the next slot (10 am - 1 pm slot), or you will finish on time before the laboratory closes at 5 pm (1 pm - 4 pm).
3. **Read the BIORAD T100 thermal cycler manual** (link on the laboratory website) if this is your first time using the machine.

B. To operate the thermal cycler:

1. **Write your name on the log book**. Indicates the number of the thermal cycler that you are using.
2. **Switch ON the machine** using its main switch at the back, on the lower right side of the machine.
3. At home screen, **select 'Saved Protocol'** if you have a saved protocol on the thermal cycler, **OR, select 'New Protocol'** to set a new protocol. For steps to create, edit and save protocols, please **refer to page 5 of the T100 thermal cycler manual**.
4. Check the **support ring (Figure 4, page 4 of the manual)** for dome caps tube, or flat caps tube.
5. **Load your PCR tubes** onto the reaction block & **close the machine lid**.
6. **Press START** to run your PCR.

C. Once your PCR run is done:

1. **Press STOP button** & the screen home will be displayed.
2. **Unload your PCR tubes**.
3. **Switch OFF** the thermal cycler.

NOTES:

- ⚠ Do not leave your PCR tubes in the thermal cycler for overnight incubation as this may be detrimental to the machine in long term.
- ⚠ Do not use the tip of your pen or pencil to operate the touch screen as this may damage the screen.