Thermal Cyclers

Eppendorf Mastercycler Gradient Pro (PSC 555, 659, NSC 338, 340, 488)

Every time you use the thermal cycler, you MUST sign the log book.

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Eppendorf Mastercycler Gradient Pro

1. Cover plate with film or caps. 10 ul volume is OK.

2. Turn on instrument back left by plug. User name: Biology; no password. OK (tab)

3. Lift lid handle and push back. Load plate. Pull lid forward and lower handle completely – will lock in place.

4. The screen is NOT touchpad – use arrows and tabs to select or move cursor. It also is NOT attached permanently to the instrument. Be careful that you don't drop it.

5. Add a folder for your lab if you want or just select Biology folder. DO NOT create a folder for yourself. You can put a folder for yourself IN the lab folder.

6. Select new. – can name your program and add comments. OK

7. Edit. Skeleton program that you can change. Blue highlighted step can be edited. Use arrows to move between steps. Use arrows to move between temp, time and # of cycles. Press enter to move to next step. The instrument sees everything between dotted lines as 1 item.

8. Make any changes you need to and then press Enter after each change.

9. Gradient cycle – select Options tab. If you don't see the Options tab, press the << tab. You can select increments to increase or decrease in temperature or time. Use arrows to get to box (next to gradient picture). Press enter to check. Now you can see some new tabs. Select Show Gradient to see temperatures or times you have setup. Just remember, change temperature in gradient page NOT in "show gradient" page.

10. You can change ramp rate with keypad or slide bar. Header – can change temperature mode from fast (default) to safe and standard. These change the dwell time – makes sure the well is the same temperature as block. Use down arrow to get to temp mode; Enter; use arrows to select

11. Exit – scroll to Biology/Enter. Select shutdown tab. Select shutdown tab.

12. #1 in center of instrument just means instrument #1.