Biacore T100 Start up/ Shut down Protocol Simplified

This protocol is for qualified users operating Biacore in IBS only. Reading the manufacturer's manual is highly recommended.

Start up procedure:

1. All buffers and solutions for use in the system should be filtered through a 0.22 μm filter.
2. Place your buffer at left buffer tray (tube A) and ddH$_2$O at right waste and water tray.
3. Fasten the clamp of the peristaltic pump in the right pump compartment.
4. Turn on the instrument and control PC.
5. Start Biacore T100 control software and wait till the temperature stabilized.
6. Choose Tools: Eject Chip to open the sensor chip port cover. Insert a new chip and close the port cover by pressing the cover. Click Dock Chip to dock the chip on to IFC or choose Tools: Insert Chip. Be sure to select chip type and provide an ID for it.
7. Run Tools: Prime immediately to fill the flow system with your buffer.
8. To start a manual run, choose Run: Manual run. Right after an injection, the sensorgram will start and a filename was required for it.
9. To start a wizard run, choose Run: Wizard. You may edit an old one or make a new template from four different categories of default templates.
10. To load samples to the rack tray choose Tools: Eject Rack. Please note that the rack tray automatically moves into the sample compartment 60 seconds after it has been eject.
11. When a run is complete, the instrument is automatically switched to standby mode. It uses about 65 mL/day of buffer A. If you were to leave your sample chip overnight, you may just left the instrument at standby mode.
Shut down procedure:

1. Choose **Tools: Stop Standby**. Choose **Tools: Eject Chip** to open the sensor chip port cover. Take out your chip and place maintenance chip to the chip port. Select maintenance chip and close the port cover by pressing the cover. Click **Dock Chip** to dock the chip on to IFC.

2. Rinse the tubing in buffer A and replace buffer A with ddH$_2$O. Run **Tools: Prime** to fill the system with water.

3. Under **Tools: More Tools...** choose **Maintenance Tools: Desorb** and load the sample to rack tray according to the pop up dialog box. It takes 1650 μL for both BIAdesorb solution 1 (0.5% SDS) and solution 2 (50mM, pH 9.5 glycine). The process takes about 20 minutes. Eject rack tray when done.

4. Choose **Tools: Shutdown** to flush the flow system and empty the IFC and tubes. It takes about 20 minutes and required water and 45 mL of 70% ethanol. Please follow the pop up instructions step by step.

5. Switch off the instrument. Open the right pump compartment and flip the tube clamp to the right.

6. Empty water bottles and waste bottle.

7. Turn off control PC and monitor.

by Dr. Jao