Spectrophotometers

ThermoFisher NanoDrop Plus (PSC 533)

Every time you use the Spectrophotometers, you MUST sign the log book.

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Nanodrop 2000/2000c

Field experience indicates that the following volumes are sufficient to ensure reproducibility:

Aqueous solutions of nucleic acids: 1 µL
Purified protein: 2 µL
Bradford, BCA, Lowry or Protein Pierce 660 nm assays: 2 µL
Microbial cell suspensions: 2 µL
It is best to use a precision pipettor (0-2 µL) with precision tips to ensure that sufficient sample (1-2 µL) is delivered.
Lower precision pipettors (0-10 µL and larger) are not as good at delivering 1 µL volumes to the measurement pedestal.
If the user is unsure about the sample characteristics or pipettor accuracy, a 2 µL sample volume is recommended.

Quick Start

1. **Double**-click the software icon and select the software application of interest from the right pane.

2. **Establish** a blank using the appropriate buffer or Water.
- Pedestal Option: Pipette 1-2 µL of the appropriate blanking solution onto the bottom pedestal, lower the arm and click **Blank**.
Note: The arm must be down for all measurements.

3. **Wipe** away the blank from the measurement pedestals using a dry, lint free laboratory wipe. Enter the sample ID in the appropriate field. **Pipette 1 µL** of sample and click **Measure**.
Note: A fresh aliquot of sample should be used for each measurement.

After the measurement:
- Simply wipe the upper and lower pedestals using a dry lint free-laboratory wipe and the unit is ready for the next sample.

- It is recommended that a new blank be taken every 30 minutes when measuring many samples in one measurement session. After 30 minutes, the time since the last blank measurement will be displayed in the bottom status bar.

Pedestal Basic Use

1. Raise the sampling arm and pipette the sample onto the lower measurement pedestal.

2. Lower the sampling arm and initiate a spectral measurement using the software on the PC. The sample column is automatically drawn between the upper and lower pedestals and the measurement is made.

3. When the measurement is complete, raise the sampling arm and wipe the sample from both the upper and lower pedestals using a dry, lint-free laboratory wipe. Simple wiping prevents sample carryover in
Subsequent measurements for samples varying by more than 1000 fold in concentration.

4. Put dry, lint-free laboratory wipe in between pedestal. Close the software.


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