Feb 24, 2020

Hemolysis measurement of plasma/serum samples with Nanodrop ND1000

Hetty Helsmoortel[1]

[1]Center for Medical Genetics Ghent

1 Works for me dx.doi.org/10.17504/protocols.io.t3teqnn

CMGG

Anneleen Decock
Center for Medical Genetics Ghent (CMGG), Cancer Research In...

ABSTRACT

This protocol describes how to measure hemolysis on plasma or serum samples.

Before you start

1 Place: room 120.042, 2nd floor MRB1

- Aliquot 3 ul plasma sample in a separate tube (can be left at room temperature)
- Open sample arm and clean sample pedestal with an ethanol-dipped swab (dust-free). Swabs are standing next to the machine.
- Clean the sample pedestal with a dry swab (dust-free).

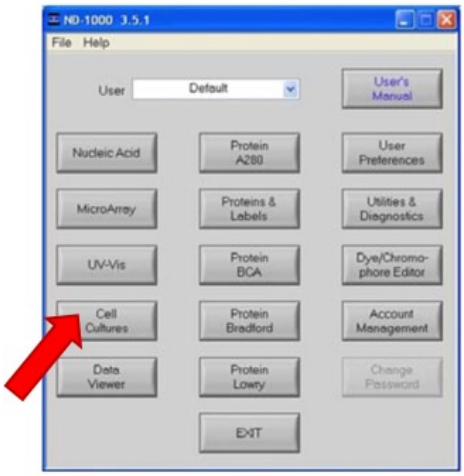
This is an open access protocol distributed under the terms of the **Creative Commons Attribution License** (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

This is an open access protocol distributed under the terms of the **Creative Commons Attribution License** (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

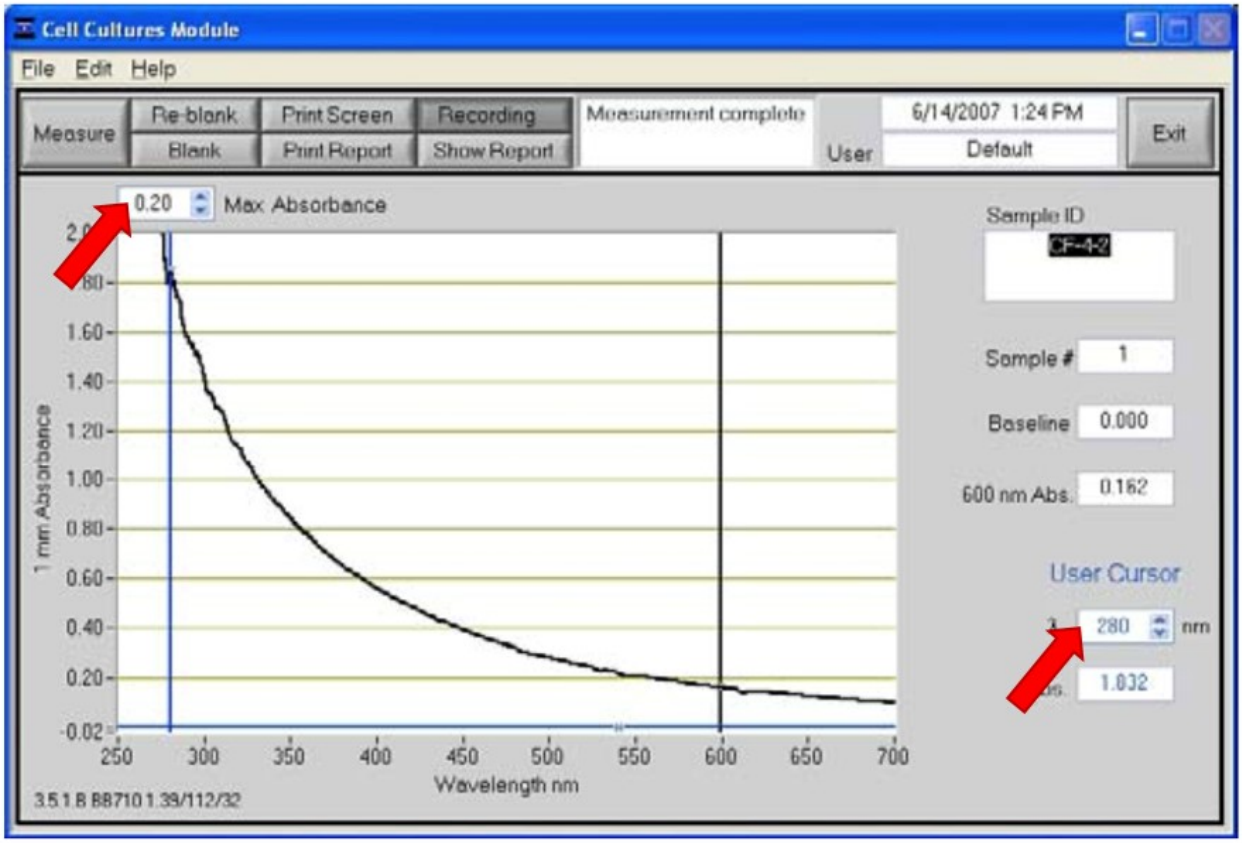
Preparing hemolysis measurement

2

- start ND-1000 software
- choose ‘Cell cultures’



- change max. absorbance from 0.2 to 2 (rescales the vertical axis)
- change wavelength (lambda) to 414 nm

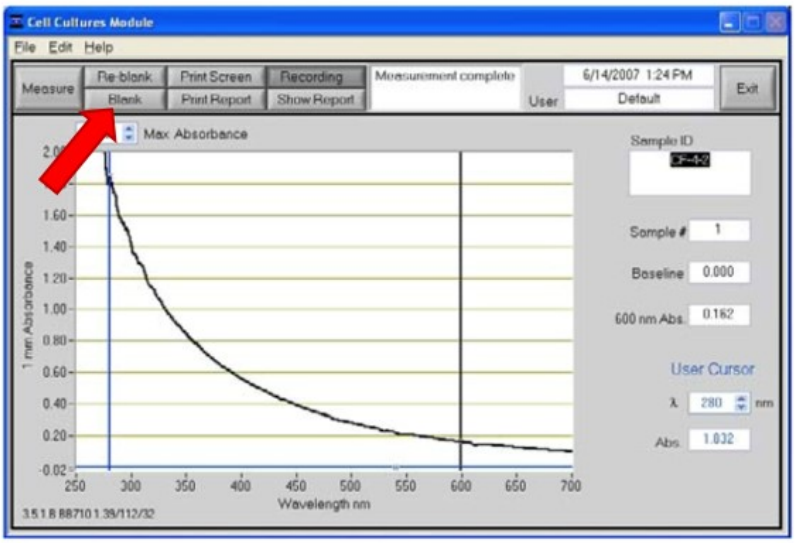


This is an open access protocol distributed under the terms of the **Creative Commons Attribution License** (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Load blank sample

3

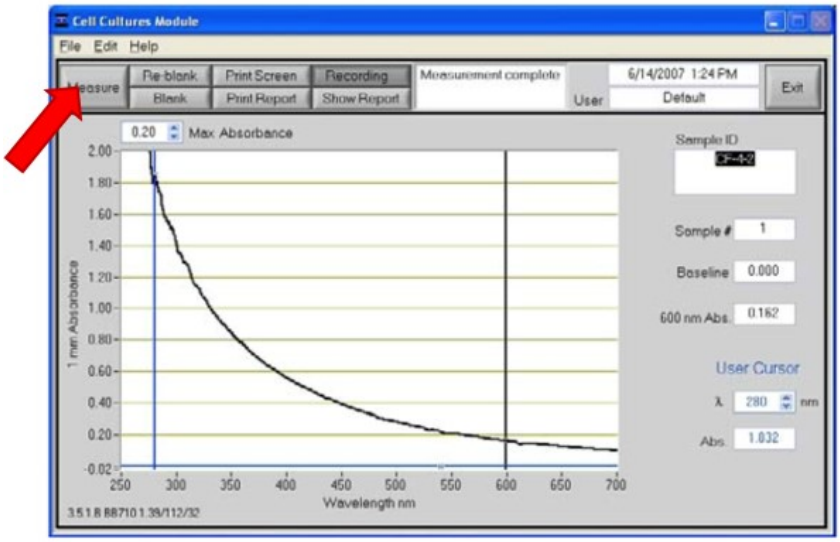
- pipet 1 ul water to the sample pedestal, using reverse pipetting to avoid bubbles (use an unused water tube)
- gently close the sample arm
- click ‘blank’ to calibrate the machine. If the wave shows peaks, repeat the pipetting and re-blank



Measure blank sample

4

- open sample arm and clean pedestal with a dust-free swab
- (to have a good reference, the first sample we measure is always a water sample)
- pipet 1 ul water to the sample pedestal, using reverse pipetting to avoid bubbles (use an unused water tube)
- gently close the sample arm
- click ‘measure’ to measure water sample



This is an open access protocol distributed under the terms of the **Creative Commons Attribution License** (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Measure plasma/serum sample(s)

5

- open sample arm and clean pedestal with a dust-free swab
- pipet 1 ul plasma sample to the sample pedestal, using reverse pipetting to avoid bubbles
- gently close the sample arm
- click ‘measure’ to measure first sample
- (repeat steps above for other samples)
- clean sample pedestal and close sample arm

Export results

6

- choose ‘Reports’ > Export Report Table Only and save to USB stick (only Excel table, no full report with wavelength plots)

This is an open access protocol distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

This is an open access protocol distributed under the terms of the **Creative Commons Attribution License** (https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited