

ELISA reader absorbance scale control EQA-program 3002 DK

Please, read this letter in full before testing and copy all enclosed material if needed.

Material

An Absorbance Test Plate (grey-filter plate) for control of the absorbance scale.

The plate has been produced with the purpose of fitting several models of Bio-Tek ELISA-plate readers.

The grey-filters are only mounted in well no. C1, D4, E2, F5, G3 and H6.

Most of the other wells are blinded, but some smaller empty openings are found in each corner of the plate, well no. A1, A12, H1 and H12, are not covered with any glass plate. These openings are smaller than the other wells and are used to control the placement of the plate. The absorbance of these wells should be 0.000 +/- 0.015. Reading is made towards air.

Well no. C6 has a normal size and is without glass. This well can be used to check the "blank" reading.

Storage

The Absorbance Test Plate must remain in the plastic bag at ambient temperature until measuring - Avoid dust. The plate must only be touched on the outer border.

Deadlines

Please, send an email to lisbeth.nielsen@deks.dk when you receive the Absorbance Test Plate.

The measurements take about one hour and must be performed within one week after receipt.

If you are not able to do perform the measurement within one week, please inform DEKS for agreement whether you have to send the plate should be forwarded to another participant.

DEKS will then arrange that your laboratory receive the plate later.

Testing procedure

1. Place the Absorbance Test Plate with the serial number (metal sign) downwards and the first row to be read first. A1 is the first well to the left.
2. Select the wavelength desired at the scheme according to the relevance for your laboratory. If the reader is not able to read at this wavelength, you can try to read at the nearest possible wavelength. (The target values are found by interpolation between the given wavelengths, but this increases the uncertainty). If you change the wavelength, it is very important that you make a note under remarks, telling the exact wavelength for you reading. Do not correct in the form it self
3. Blank the reader with air.
4. Read the results.
5. Check that the absorbance for the well no. A1, A12, H1 and H12 correspond to No. C6. Adjust the movement of the plate if necessary.
6. Turn the plate so that A1 is now found to the right and at the bottom, A1 is then read as the last well. (The serial number should be kept downwards). Item 2-5 is repeated. Hereby it is controlled that each channel in the ELISA-reader measures the same. Make a control or perform maintenance on the instrument if the spreading between the results is high.

Reporting of results

The scheme for reporting the results can be found at www.deks.dk under:

Products/Danish EQA-programs/ELISA readers Photometry control (3002 DK)/ Get report form.

Open the file and save it on your pc.

Fill out the green areas at the top with your laboratory specifications and fill in your results in the scheme.

Email a copy of the result scheme to lisbeth.nielsen@deks.dk.

Note, that if you use another wavelength than described, please note the actual wavelength in the green comment field. Do not correct in the form it self.

When DEKS have received your results, we will email you the certified values to compare with your own results. The certified values come from the certificate, of which you also receive a copy.

For Bio-Tek equipment, deviations of $\pm 0,020$ milli absorbance and of ± 2 % of the absorbance are accepted, which is identical to the accept interval stated on the table in parentheses. Use it as guidance.

When DEKS has received results from all participants, a final report will be prepared and uploaded to DEKSONline at primo February 2024.

Circulation of the Absorbance Test Plate

The record is packaged in the black box and returned in a flamingo box with bubble wrap in which it was received.

Enclose the original written material for the next participant to make her/his copy.

The shipment must be sent with tracking to the next participant on the enclosed list or returned to DEKS

Questions

If you have any doubt, please contact DEKS, Lisbeth Nielsen, email: lisbeth.nielsen@deks.dk

Info

Please note that if you need a plate for testing your instrument at a self-selected time a separate plate can be ordered any time of the year by contacting DEKS and order the EQA-programme 3710 DK.

Kind regards
Lisbeth Nielsen
DEKS

*Enclosed List of participants in your region.