



# Frequently Asked Questions

## Glucose Assay Kit

- Q. 1:** The temperature mentioned for your Glucose Assay Procedure (40 or 50°C) – is this for incubation of the mix or for reading the results at the spectrophotometer as well? Do I need a spectrophotometer which will keep the temperature constant or could I read the results at room temperature?
- A:** The temperature is just for the incubations. It is an end-point assay, so the spectrophotometer does not need to be temperature controlled.
- Q. 2:** I have some questions regarding the Glucose Oxidase and peroxidase in the Glucose Assay Kit. At what optimal pH do the enzymes work? Does the sample that is added to the enzyme mix show incorrect results if it is outside a certain pH range?
- A:** The test is best run at pH 7.4. The reagent is buffered at this pH. Using different pH values will affect results, i.e. it may take longer to reach this end point; but the same end-point value should be obtained if not too far away from this pH value.
- Q. 3:** What is the linear range of the Glucose Assay Kit?
- A:** The test is set up to measure between 10 and 100 micrograms per assay (i.e. 0.1ml of 0.1 to 1.0 mg/ml). You may prefer to use 3.0ml of GOPOD reagent mixture plus 1.0ml of sample; in this case the concentration range in the material being analysed (diluted) should be ~10 to 100 micrograms per ml. The test is linear up to an absorbance of 1.4 (final assay volume of 3.2ml). If the final volume is 4.0ml, then linearity will be up to about 1.0 absorbance unit.
- Q. 4:** I have some questions on your Glucose Assay Kit. Is the colour stable at room temperature? Does the reaction continue if not read within 20 minutes?
- A:** The reaction is complete after approx. 15min, and the colour is stable at temperatures of 20-50°C for at least an extra hour.
- Q. 5:** We have stored our Megazyme Glucose Assay Kit at 0-5°C for some weeks, because that is what is written on the package. Now we have noticed that on some of the vials it says storage at -20°C. Can you please tell me how long the products can be stored at 0-5°C without damage?
- A:** The kit enzymes can be stored at 0-5°C for up to 12 months, so they will be perfectly fine.

Q. 6: Please let us know the lower limit of detection of measuring glucose using your Glucose Assay Kit (mg/ml).

A: 1 microgram gives an absorbance of 0.01 if 3 ml of GOPOD are used.

If 1 ml of GOPOD is used, 1 microgram gives an absorbance of 0.03 OD.