

Division of Laboratory Medicine

Immunology

AP100 Alternative Pathway Haemolytic Complement

General information

Specimen transport: All samples from outside the hospital should be transported on an ice pack. Transport at room temperature is acceptable within this hospital if the sample is delivered to the Immunology laboratory within 3 hours on weekdays only (not including bank holidays).

Repeat frequency: At significant change in symptoms

Special precautions: Transport as soon as possible to lab. It is important that this is done to avoid reduction in activity that can occur with time.

Laboratory information

Normal reference range: 30 – 113 % complement activity

Volume and sample type: 4ml serum on ice

Method: ELISA

Turnaround time (calendar days from sample receipt to authorised result): Median – 6

Participation in EQA Scheme: INSTAND Complement Analysis EQA scheme

Clinical information

Indications for the test: Suspected primary immunodeficiencies involving complement components e.g. recurrent infections and in the investigation of complement mediated renal disease.

Factors affecting the test: If screened too soon after acute infection leads to false (positive) results due to complement activation. Some complement components are temperature sensitive and it is important that the samples should be delivered to the lab in a timely manner and on ice

(Last updated October 2025)