



C3 Complement

Synonyms

C3

Clinical Indication

C3 (and C4) is useful in investigation of patients with renal disease, joint disease and multi-system disorders with evidence of vasculitis, since low concentrations would imply an immunological basis for the symptoms. Complement levels may also be useful in patients with recurrent infections with normal or raised immunoglobulin levels, since genetic and acquired defects sometimes present as immunodeficiency (CH50 analysis also required in such cases).

Part of Profile / See Also

Complement (C3,C4)

Request Form

Combined Pathology manual Blood form or ICE request

Availability / Frequency of Analysis

On request

Turnaround Time

Same day (Monday to Friday)

Patient Preparation

None required

Sample Requirements

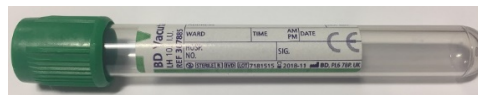
Specimen Type

Serum

Volume

2 ml

Container



Green top (lithium-heparin) tube



Or Yellow top (SST) tube



Or paediatric orange top (lithium-heparin)



Or paediatric green top (lithium-heparin)

Plain serum samples may also be used.

Reference Range & Units

0.9 – 1.8 g/L

Interferences

Interpretation & Clinical

Decision Value (if applicable)

In the appropriate clinical setting, a low complement is diagnostic of active disease, and a return to normal is accompanied by return of complement levels to normal.

Low C4, Normal C3 seen in: Genetic Deficiency, SLE, hereditary / acquired angioedema (check C1 esterase inhibitor), cryoglobulinaemia.

Normal C4, low C3 seen in: Post- Streptococcal glomerular nephritis, patients with C3-nephritic factor, gram - negative sepsis (alternative pathway activation), Endocarditis.

Low C4 & low C3 seen in: Sepsis, SLE (Active), vasculitis

Beckman kit insert

References

Test code

C3C4

Lab Handling

Analysed from primary tube and stored at 4°C
Serum and plasma samples at 2-8°C for 8 days.