



PF-PTD-59

C4 Complement

Synonyms

C4

Clinical Indication

C4 is usually measured in investigation of patients with renal disease, joint disease and multi-system disorders with evidence of vasculitis; low concentrations imply an immunological basis for the symptoms. C4 (and C3) levels may 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

On request

Analysis

Turnaround Time

Same day (Monday to Friday)

Patient Preparation

None required

Sample Requirements

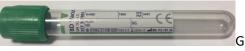
Specimen Type

Serum and plasma.

Volume

2 ml

Container



Green top (lithium-heparin) tube



Yellow top (SST) tube



paediatric orange top (lithium-heparin)



paediatric green top (lithium-heparin)

Plain serum samples may also be used.

Reference Range & Units

0.14 - 0.54 g/L

Reference; Protein Reference Unit Handbook, 9th Edition 2007

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.



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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.

References Beckman

Test code C3C4

Lab Handling Analysed from primary tube and stored at 4°C.

Serum and plasma samples stable at 2-8°C for 8 days.