H·O·D
HOUSE of DIAGNOSTICS

Patient Name :	Demo Patient Name	**Lab No :**	Demo Visit No
Age / Sex :	79 Y / F	**Registration On :**	19-Jan-25 09:09
Referred By :	DEMO HOSPITAL	**Patient ID :**	UHID.DEMO.001
Centre :	HOD Head Office		

C3 C4 Complement Component

Serum Sample

Accession No: DEMO_BARCODE **Collected On:** 19-Jan-25 09:10 **Received On:** 19-Jan-25 16:35 **Approved On:** 19-Jan-25 20:33

Observation	Result	Unit	Biological Ref. Interval	Method
Complement C3	112	mg/dL	88-165	Immunoturbidimetric
Complement C4	32.6	mg/dL	14.0-44.0	Immunoturbidimetric

Clinical Significance Of c3:
The classic and alternative complement pathways converge at the C3 step in the complement cascade. Low levels indicate activation by one or both pathways. Complement C3 levels may be useful in following the activity of immune complex diseases as most of them show decreased C3 levels. CH50 is considered the best test to detect inherited deficiencies.
Increased in - many inflammatory conditions as an acute-phase reactant, active phase of rheumatic diseases (eg, rheumatoid arthritis, SLE), acute viral hepatitis, myocardial infarction, cancer, diabetes mellitus, pregnancy, sarcoidosis, amyloidosis, thyroiditis.
Decreased by - decreased synthesis (protein malnutrition, congenital deficiency, severe liver disease), increased catabolism (immune complex disease, membranoproliferative glomerulonephritis [75%], SLE, SjAgren syndrome, rheumatoid arthritis, DIC, paroxysmal nocturnal hemoglobinuria, autoimmune hemolytic anemia, gram-negative bacteremia), increased loss (burns, gastroenteropathies)

Clinical Significance of C4:
C4 is a component of the classic complement pathway. Depressed levels usually indicate classic pathway activation. Low C4 accompanies acute attacks of hereditary angioedema (HAE), and C4 is used as a first-line test for the disease. C1 esterase inhibitor levels are not indicated for the evaluation of hereditary HAE unless C4 is low.
- Increased in - various malignancies (not clinically useful).
- Decreased by
  -- decreased synthesis (congenital deficiency),
  -- increased catabolism (SLE, rheumatoid arthritis, proliferative glomerulonephritis, HAE
  -- increased loss (burns, protein-losing enteropathies).

Advise: *Please correlate results with clinical conditions*

This is a **Demo Signature**
and the doctor's signature should appear here

In case of any unexpected or alarming results, please contact us immediately for re-confirmation, clarifications, and rectifications, if needed.

Scan to Validate