

Specimen Collected: 14-Dec-22 16:55

C5 Inhibitors Drug Monitoring  
Panel

|Received: 14-Dec-22 16:55

Report/Verified: 14-Dec-22 16:57

Procedure	Result	Units	Reference Interval
Complement Component 5	22 <sup>H</sup>	mg/dL	[7-20]
Complement Activity, Alternative Pathway	<35 <sup>L</sup> f1 i1	% Normal	[>=59]
Complement Activity, Total Turbidimetric	<12.5 <sup>L</sup> f2 i2	U/mL	[38.7-89.9]
Complement C5, Functional	<12.9 <sup>L</sup> f3 i3	U/mL	[>=23.0]
C5 Inhibitors Drug Monitoring Pan Interp	See Note <sup>i4</sup>		

**Result Footnote**

f1: Complement Activity, Alternative Pathway

Absent or low complement alternative pathway functional (AH50) activity indicates inherited or acquired deficiencies in complement components, or a secondary consumption process or response to therapy. Low or absent AH50 activity with normal total complement functional (CH50, test code 3002575) activity suggests defects in alternate complement pathway. Low CH50 and AH50 results suggest defects in late complement components C3-C9 or a secondary consumption of complements. Low or absent AH50 activity due to abnormal control of the complement alternative pathway may occur in kidney diseases such as atypical hemolytic uremic syndrome, C3 glomerulonephritis, and dense-deposit disease, as well as in atypical postinfectious glomerulonephritis. If low AH50 value is unexpected or does not correlate with the patient's clinical condition, repeat analysis with a fresh frozen serum specimen is suggested for verification.

f2: Complement Activity, Total Turbidimetric

Absent or low activity in total complement functional assay (CH50) indicates inherited or acquired deficiencies in complement components, or a secondary consumption process or response to therapy. Low CH50 result with normal complement alternate pathway functional (AH50, test code 2005373) activity suggests defects in classical complement pathway. Low CH50 and AH50 results suggest defects in late complement components, C3-C9 or a secondary consumption of complements. Low CH50 activity may occur during disease exacerbation in systemic lupus erythematosus, immune complex diseases such as glomerulonephritis, rheumatoid arthritis, cryoglobulinemia, or during infections. If low CH50 value is unexpected or does not correlate with the patient's clinical condition, repeat analysis with a fresh frozen serum specimen is suggested for verification.

f3: Complement C5, Functional

Low C5 functional activity suggests inherited or acquired C5 deficiencies or can indicate response to therapy. Low C5 functional activity accompanied with low C5 concentration (Test code: 0050156) and low C3 (Test code: 0050150) and C4 (Test code: 0050155) concentrations indicate secondary consumption of complements.

**Test Information**

i1: Complement Activity, Alternative Pathway

INTERPRETIVE INFORMATION: Complement Activity,  
Alternative Pathway (AH50)

This test is intended for screening of functional activity of the alternative pathway of the complement system. Abnormal test results can be due to hereditary absence or acquired functional defect in the activity of any of the individual components of the alternative pathway.

\*=Abnormal, #=Corrected, C=Critical, f=Result Footnote, H=High, i=Test Information, L=Low, t=Interpretive Text, @=Performing lab

Unless otherwise indicated, testing performed at:

ARUP Laboratories

500 Chipeta Way, Salt Lake City, UT 84108

Laboratory Director: Jonathan R. Genzen, MD, PhD

ARUP Accession: 22-348-900267

Report Request ID: 16443735

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**Test Information**

i1: Complement Activity, Alternative Pathway

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i2: Complement Activity, Total Turbidimetric  
REFERENCE INTERVAL: Complement Activity Total, (CH50)

- 38.6 U/mL or less .....Low
- 38.7-89.9 U/mL .....Normal
- 90.0 U/mL or greater .....High

i3: Complement C5, Functional  
REFERENCE INTERVAL: Complement C5, Functional

- Low: Less than 23 U/mL
- Low-Normal: Greater than or equal to 23-28.3 U/mL
- Normal: Greater than 28.3 U/mL

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the U.S. Food and Drug Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes.

i4: C5 Inhibitors Drug Monitoring Pan Interp  
INTERPRETIVE INFORMATION: C5 Inhibitors Drug Monitoring Panel

Patients treated with C5 inhibitors may show decreased/absent activity in total complement functional assay (CH50), alternative pathway functional assay (AH50), and C5 functional assay with normal or elevated C5 protein concentrations. Normal CH50, AH50, or C5 functional activity with normal or elevated C5 protein concentrations indicate inadequate complement blockage. Serial measurements are recommended when monitoring treatment efficacy. Decreases in both C5 concentration and C5 functional activity suggests a secondary consumption process or C5 deficiency. Repeat testing using a new specimen is suggested if in vitro complement activation and consumption of components due to conditions of collection, transport, and/or handling is suspected.

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