

Test Definition: FC4AL

C4 Level by RIA

Overview

Method Name

Radioimmunoassay (RIA)

NY State Available

Yes

Specimen

Specimen Type

Plasma EDTA

Specimen Required

Supplies: Sarstedt Aliquot Tube, 5 mL (T914)

Container/Tube: Lavender top (plasma gel tubes are **not acceptable**)

Submission Container/Tube: Plastic vial **Specimen Volume:** 1.5 mL plasma

Collection Instructions:

- 1. Mix well.
- 2. Within 30 minutes of collection (preferably immediately after venipuncture), centrifuge at ambient temperature, aliquot 1.5mL of plasma into a plastic vial and freeze immediately on dry ice or at -60 C or below in an ultra-low freezer.

3. Ship frozen.

Specimen Minimum Volume

Plasma: 0.5 mL

Reject Due To

Hemolysis	Mild OK; Gross reject
-----------	-----------------------

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Plasma EDTA	Frozen	365 days	

Clinical & Interpretive

Clinical Information

The complement system is part of our innate immune response. It is vital to our defense against invasive



Test Definition: FC4AL

C4 Level by RIA

microorganisms. Complement activation can occur through the classical, lectin and alternative pathway, which then converge to a common terminal pathway. Activation of the complement pathway(s) results in the generation of biologically active peptides, also known as complement split products, and referred to as anaphylatoxins (C4a, C3a, C5a) which protect us from invasive microorganisms by enhancing inflammation, facilitating the clearance of immune complexes and apoptotic cells, enhancing cellular and antibody immune responses and altering vascular permeability, as well as smooth muscle contractility.

The anaphylatoxin C4a can be elevated above normal levels in many conditions associated with inflammation, including chronic fatigue syndrome, multiple sclerosis, immune complex diseases such as antiphospholipid syndrome and autoimmune conditions such as lupus. C4a is also an early marker of acute Lyme disease.

Reference Values

0-2830 ng/mL

Interpretation

Elevated C4a levels are indicative of classical and/or lectin pathway activation.

Performance

PDF Report

No

Day(s) Performed

Monday through Friday

Report Available

9 to 14 days

Performing Laboratory Location

National Jewish Health

Fees & Codes

Fees

- Authorized users can sign in to <u>Test Prices</u> for detailed fee information.
- Clients without access to Test Prices can contact <u>Customer Service</u> 24 hours a day, seven days a week.
- Prospective clients should contact their account representative. For assistance, contact <u>Customer Service</u>.

Test Classification

The performance characteristics for this test have been validated by National Jewish Health. It has not been cleared or approved by the U.S. Food and Drug Administration. The results are not intended to be used as the sole means for clinical diagnosis or patient management decisions. This laboratory is certified under the Clinical Laboratory



Test Definition: FC4AL

C4 Level by RIA

Improvement Amendments of 1988 (CLIA-88) as qualified to perform high complexity clinical laboratory testing.

CPT Code Information

86160

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
FC4AL	C4a Level	Not Provided

Result ID	Test Result Name	Result LOINC® Value
FC4AL	C4a Level	Not Provided