

**TEST CHANGE**

**Rickettsia rickettsii (Rocky Mountain Spotted Fever) Antibody, IgM**

0050372, RMSF M

**Specimen Requirements:**

**Patient Preparation:**

**Collect:** Serum Separator Tube (SST).

**Specimen Preparation:** Separate from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP [standard transport tube](#). ~~Standard Transport Tube~~. (Min: 0.43 mL) Parallel testing is preferred and convalescent specimens must be received within 30 days from receipt of the acute specimens.

**Transport Temperature:** Refrigerated.

**Unacceptable Conditions:** Contaminated, hemolyzed, or severely lipemic specimens.

**Remarks:** Mark specimens plainly as "acute" or "convalescent."

**Stability:** After separation from cells: Ambient: 48 hours; Refrigerated: 2 weeks; Frozen: 1 year (avoid repeated freeze/thaw cycles)

**Methodology:** Semi-Quantitative Indirect Fluorescent Antibody [\(IFA\)](#)

**Performed:** Sun-Sat

**Reported:** 1-3 days

**Note:**

**CPT Codes:** 86757

**New York DOH Approval Status:** This test is New York DOH approved.

**Interpretive Data:**

The CDC does not use IgM results for routine diagnostic testing of Rocky Mountain Spotted Fever, as the response may not be specific for the agent (resulting in false positives) and the IgM response may be persistent from past infection.

Antibody reactivity to *Rickettsia rickettsii* antigen should be considered Spotted Fever group reactive. Other organisms within the group include *R. akari*, *R. conorii*, *R. australis*, and *R. sibirica*.

Seroconversion, a fourfold or greater rise in antibody titer, between acute and convalescent sera is considered strong evidence of recent infection. Acute-phase specimens are collected during the first week of illness and convalescent-phase samples are generally obtained 2-4 weeks after resolution of illness. Ideally these samples should be tested simultaneously at the same facility. If

the sample submitted was collected during the acute-phase of illness, submit a marked convalescent sample within 25 days for paired testing.

Reference Interval:

Less than 1:64	Negative - No significant level of IgM antibody detected.
1:64 or greater	Positive - Presence of IgM antibody detected, which may indicate a current or recent infection; however, low levels of IgM antibodies may occasionally persist for more than 12 months post-infection.