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**Lab Dept:** Chemistry

**Test Name:** RHEUMATOID FACTOR, QUANTITATIVE

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***General Information***

**Lab Order Codes:** RA

**Synonyms:** RF; RA, Rheumatoid Arthritis Factor

**CPT Codes:** 86431– Rheumatoid factor; quantitative

**Test Includes:** Rheumatoid factor concentration reported in IU/mL.

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***Logistics***

**Test Indications:** Rheumatoid factor quantitates autoantibodies directed against IgG immunoglobulins and are members of a class of proteins that become elevated in inflammatory states. RA is most sensitive for monitoring the level of inflammation associated with rheumatoid arthritis.

**Lab Testing Sections:** Chemistry (all specimens analyzed on the Mpls campus)

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 1 day

**Special Instructions:** N/A

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***Specimen***

**Specimen Type:** Blood

**Container:** SST (Gold, marble or red)

**Draw Volume:** 0.6 mL blood

**Processed Volume:** 0.2 mL serum

**Collection:** Routine collection

<b>Special Processing:</b>	Lab Staff: Centrifuge specimen, remove plasma/serum aliquot into a plastic sample cup. Specimens can be stored refrigerated for 7 days or frozen for 3 months. Centrifuge turbid or particulate samples prior to analysis.
<b>Patient Preparation:</b>	None
<b>Sample Rejection:</b>	Mislabeled or unlabeled specimen; turbid samples that do not clear after centrifugation

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***Interpretive***

<b>Reference Range:</b>	<b>Age</b>	<b>Range (IU/mL)</b>
	0 - <15 days:	9 – 17.1
	15 days - <19 years:	<13
	Adult:	<30
<p>Lower values should not be classified as “rheumatoid factor positive”. Even clinically unremarkable individuals may be found have low levels of rheumatoid factor. Such persons generally exhibit low titers, with the incidence increasing with age, irrespective of gender.</p>		

**Critical Values:** N/A

**Limitations:** Pharmaceuticals listed below may affect rheumatoid factor concentration:

- Interferon Alfa-2a and methotrexate may decrease serum rheumatoid factor levels.
- Penicilamine, pentropril, and timegadine have no significant effects on serum rheumatoid factor levels.
- Methyldopa, oral contraceptives, and oxypenisatin may increase serum rheumatoid factor levels.
- Nonsteroidal anti-inflammatory drugs may decrease or have no significant effect on serum rheumatoid factor levels.

**Methodology:** Immunoturbidimetric

**References:**

Tietz, NW, Textbook of Clinical Chemistry (1999) WB Saunders Co., Philadelphia, PA, pp 42-50, pp 507-512

Abbott Alinity c Rheumatoid Factor Reagent Kit Instructions for Use, Abbott Laboratories Diagnostics Division, Abbott Park, IL, 60064, USA. April 2019

Abbott Alinity c Rheumatoid Factor Calibrator Kit Instructions for Use, Abbott Laboratories Diagnostics Division, Abbott Park, IL, 60064, USA. August 2019

Bio-Rad Liquichek Immunology Control Package Insert, Bio-Rad Laboratories, Irvine, CA, 92618

CALIPER Reference Range Studies, Accessed October 27, 2020

**Updates:**

4/29/2014: Plasma added as preferred specimen type.

12/8/2020: Updated for method Abbott Alinity, removed method Siemens Vista

2/17/2021: Updated reference range