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**Lab Dept:** Transfusion Services

**Test Name:** GRANULOCYTE ANTIBODIES

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***General Information***

**Lab Order Codes:** LKA

**Synonyms:** Granulocyte Serology; Granulocyte Antibodies; Antineutrophil Antibody; Antileukocyte Antibodies

**CPT Codes:** 86021 – Antibody identification; leukocyte antibodies

**Test Includes:** Purified granulocyte preparations from normal donors are incubated with patient's test serum and then with fluorescein-tagged antihuman globulin reagent. Sera containing the antibodies deposit immunoglobulin on the target cell membrane which is detected by the second stage antibody and visualized by fluorescence microscopy. The test is reported as positive or negative.

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***Logistics***

**Test Indications:** The workup of individuals having febrile, nonhemolytic transfusion reactions, and for the detection of individuals with autoimmune neutropenia. See [Special Instructions](#).

**Lab Testing Sections:** Transfusion Service - Sendouts

**Referred to:** Mayo Medical Laboratories (MML Test: LAGGT)

**Phone Numbers:** MIN Lab: 612-813-6820

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours.

**Turnaround Time:** Performed Monday, Wednesday and Friday, results in 7 – 15 days

**Special Instructions:** **Note:** Only pretransfusion reaction specimens are acceptable.

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***Specimen***

**Specimen Type:** Blood

**Container:** Red top NO GEL tube

**Draw Volume:** 4.5 mL (Minimum: 0.9 mL) blood

<b>Processed Volume:</b>	1 mL (Minimum: 0.3 mL) serum
<b>Collection:</b>	All specimens submitted must be appropriately labeled at the bedside with the time and date of collection, and the signature of the individual collecting the specimen. A completed order, either through the HIS or general requisition must accompany each specimen.
<b>Special Processing:</b>	Lab Staff: Remove serum from clot as soon as possible. Place serum aliquot into a screw-capped round bottom plastic vial. Store and ship at refrigerated temperatures. (Ambient and frozen specimens will be accepted as well). Forward promptly.
<b>Patient Preparation:</b>	The patient must be positively identified when the specimen is collected.  The label on the blood specimen must correspond with the identification on the patient's Medical Record wrist or ankle band and on the physician's/practitioner's orders.
<b>Sample Rejection:</b>	Sample placed in a serum separator tube; unlabeled or mislabeled specimens

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### ***Interpretive***

<b>Reference Range:</b>	Negative (Reported as positive or negative.)  A positive result in an individual being worked up for a febrile transfusion reaction indicates the need for leukocyte-poor (filtered) red blood cells.  Note: This test cannot distinguish between allo- and autoantibodies.
<b>Limitations:</b>	Not useful for diagnosis of neutropenia caused by marrow suppression by drugs or tumors.
<b>Methodology:</b>	Indirect Immunofluorescence
<b>References:</b>	<a href="#">Mayo Medical Laboratories</a> April 2016
<b>Updates:</b>	3/1/2004: Testing moved from North Central Blood Services at the American Red Cross to Mayo Medical Laboratories. 12/19/2011: Preferred temperature storage changed from room temp to refrigerated