
Lab Dept: Transfusion Services

Test Name: GRANULOCYTE ANTIBODIES

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.

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.

Specimen

Specimen Type: Blood

Container: Red top NO GEL tube

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

Processed Volume:	1 mL (Minimum: 0.3 mL) serum
Collection:	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.
Special Processing:	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.
Patient Preparation:	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.
Sample Rejection:	Sample placed in a serum separator tube; unlabeled or mislabeled specimens

Interpretive

Reference Range:	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.
Limitations:	Not useful for diagnosis of neutropenia caused by marrow suppression by drugs or tumors.
Methodology:	Indirect Immunofluorescence
References:	Mayo Medical Laboratories April 2016
Updates:	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