Lab Dept:	**Transfusion Services**
Test Name:	**GRANULOCYTE ANTIBODY SCREEN**

General Information

Lab Order Codes:	LAGGN
Synonyms:	Neutrophil Antibodies; Leukoagglutinin; Granulocyte Binding IgG
CPT Codes:	86021 x 2
Test Includes:	The combined interpretation of granulocyte immunofluorescence test (GIFT) and granulocyte agglutination test (GAT) results is considered the gold standard for granulocyte antibody screening. Both methods are performed in parallel by mixing the patient's serum with freshly collected granulocytes from healthy donors.

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 Clinic Laboratories (MML Test: LAGGN)
Phone Numbers:	MIN Lab: 612-813-6820 STP Lab: 651-220-6550
Test Availability:	Daily, 24 hours.
Turnaround Time:	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:	1.5 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.
Special Processing:	Lab Staff: Centrifuge and aliquot serum into a screw-capped round bottom plastic vial. Store and ship at refrigerated temperatures. Forward promptly. Specimen stable refrigerated (preferred) for 30 days, ambient for 7 days, frozen for 1 year.
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; specimens collected after a transfusion reaction

Interpretive

Reference Range:	Not applicable 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, nor can it determine the specificity of the detected antibody. Results should be correlated to clinical history.
Limitations:	Not useful for diagnosis of neutropenia caused by marrow suppression by drugs or tumors.
Methodology:	Granulocyte immunofluorescence test (GIFT) and the granulocyte agglutination test (GAT)
References:	Mayo Clinic Laboratories October 2025
Updates:	10/2/2025: Initial entry.