Lab Dept: Serology

Test Name: TORCH TITER IGG PANEL

General Information

Lab Order Codes: TORGG

Synonyms: Toxoplasma gondii IgG Antibody; Rubella Virus IgG Antibody; Cytomegalovirus (CMV) IgG Antibody; Herpes Simplex Virus (HSV) IgG Type 1 IgG Antibody; Herpes Simplex Type 2 IgG Antibody

CPT Codes: 86777 – Toxoplasma IgG
86762 – Rubella IgG
86644 – Cytomegalovirus IgG
86695 – Herpes simplex IgG, type 1
86696 – Herpes simplex IgG, type 2

Test Includes: Toxoplasma gondii IgG Antibody and IgG value, Rubella Virus IgG Antibody and Index value, Cytomegalovirus (CMV) IgG Antibody and Herpes Simples Virus (HSV) IgG type 1 and IgG type 2 Antibody.

Logistics

Test Indications: As an indication of past or recent infection with Toxoplasma gondii, cytomegalovirus, or herpes simplex virus in individuals >6 months of age.

Toxoplasma, rubella, cytomegalovirus, and herpes are all causes of potentially catastrophic congenital infections, which can be quickly fatal or lead to chronic sequelae including hepatitis, encephalitis, and failure to thrive. In the fulminant case serologic diagnosis is of little use since the disease outstrips the immune response and even IgM antibody cannot be demonstrated in time to be clinically useful. However, in the disease which becomes manifest weeks to months after birth, demonstration of IgM antibody or rising titers of IgG antibody can confirm a diagnosis of specific infection. The presence of IgM-specific antibody in cord, fetal, or neonatal blood indicates congenital infection. It should be emphasized that TORCH testing is of very limited usefulness. Results must be interpreted in conjunction with complete clinical information, and such testing in no way substitutes for careful clinical examination and judgment. TORCH testing should not be applied indiscriminately to pregnant women or infants with nondescript illnesses.

Lab Testing Sections: Serology - Sendouts

Referred to: Mayo Medical Laboratories (MML Test: TRCHG)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 - 3 days, performed Monday – Saturday.

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: SST (Gold, marble or red) tube

Draw Volume: 4.5 mL (Minimum: 3.6 mL) blood

Processed Volume: 1.5 mL (Minimum: 1.2 mL) serum

Collection: Routine blood collection

Special Processing: Lab Staff: Centrifuge specimen, remove serum aliquot into a screw-capped round bottom plastic vial. Store and ship at refrigerated temperatures. Forward promptly.

Patient Preparation: None

Sample Rejection: Specimens other than serum; gross specimen contamination; gross hemolysis; gross lipemia; mislabeled or unlabeled specimens

Interpretive

Reference Range:

Toxoplasma gondii IgG:	
Reference range: Negative	
Interpretive criteria:	
< or =9 IU/mL	Negative
10 - 11 IU/mL	Equivocal
> or =12 IU/mL	Positive
T. gondii IgG is typically detected within 1-2 weeks of infection, peaks within 2-3 months, and persists at low but detectable levels throughout life.	

Rubella IgG:
Vaccinated: Positive (>=1.0 AI) Unvaccinated: Negative (<=0.7 AI)
Reported as positive or negative
Positive patient results indicate past exposure to either rubella virus or vaccine and probable protection from clinical infection. Seroconversion indicates infection subsequent to the first negative specimen.
Cytomegalovirus IgG:
Reference range: Negative Reported as Negative, Positive or Equivocal
HSV-1,2 Type Specific IgG:
Reference range: Negative (reported as positive, negative or equivocal)
Interpretive criteria: The presence of a single positive IgG result does not differentiate between infection acquired recently or in the remote past. High prevalence of antibodies in the normal population negates the usefulness of single specimen testing for evaluation of acute phase infection unless IgM class antibody can be demonstrated. Individuals infected with HSV may not exhibit detectable levels of IgG antibody to gG-1 or gG-2 antigens in the early stages of infection.

Critical Values: N/A

Limitations: This profile is not useful for diagnosing infection in infants <6 months of age. IgG antibodies in this age group are usually the result of passive transfer from the mother.

Positive test results may not be valid in persons who have received blood transfusions or other blood products in the past several months.

Results must be used in conjunction with clinical symptoms and patient history.

This test should not be used as a general screen in the absence of clinical symptoms of known exposure.

Methodology: Multiplex Flow Immunoassay (MFI)

References:	Mayo Medical Laboratories November 2017
Update:	4/14/2004: Test moved from Viromed Laboratories/LabCorp to Mayo Medical Laboratories forward to Focus Technologies, Inc. 10/13/2004: Test moved from MML forward to Focus Technologies to being performed at MML. Note changes in reference range, changes in CPT coding. HSV IgM testing will no longer be automatically performed with positive HSV IgG values. 6/11/2013: Method change, note new reference ranges. 10/16/13: Added AI values to Rubella, IgG. 11/6/2017: Updated draw container.