Lab Dept:	**Serology**
Test Name:	**CYTOMEGALOVIRUS (CMV) ANTIBODIES, IgG & IgM**

General Information

Lab Order Codes:	CMV
Synonyms:	Anti-CMV Antibodies-IgG and IgM ; CMV Serology; Cytomegalovirus Antibodies
CPT Codes:	86644 – CMV antibodies (IgG) 86645 – CMV antibodies (IgM)
Test Includes:	Anti-CMV Antibodies, IgG and IgM

Logistics

Test Indications:	Intended for the qualitative detection of IgG and IgM antibodies to Cytomegalovirus in human sera to indicate the following: no exposure to CMV or current or previous infection with CMV.
Lab Testing Section:	Chemistry (Performed on the St. Paul campus)
Phone Numbers:	MIN Lab: 612-813-6280 STP Lab: 651-220--6550
Test Availability:	Daily, 24 hours
Turnaround Time:	1 - 3 days, testing is performed daily, Mon – Fri, during normal business hours
Special Instructions:	N/A

Specimen

Specimen Type:	Blood
Container:	SST (Gold, marble or red)
Draw Volume:	1.5 mL blood
Processed Volume:	0.5 mL serum

Collection: Blood should be collected aseptically by venipuncture and placed in a sterile SST container without anticoagulant and allowed to clot at room temperature.

Special Processing: Lab Staff: Centrifuge specimen as early as possible after specimen has clotted; transfer serum to a plain polypropylene tube and refrigerate. If testing is delayed longer than 5 days, serum should be frozen at -20ºC or colder. Do not store serum in a self-defrosting freezer.

Patient Preparation: None

Sample Rejection: Sera exhibiting a high degree of hemolysis; icterus; lipemia or microbial contamination are not recommended because these conditions may cause aberrant results. Mislabeled or unlabeled specimens.

Interpretive

Reference Range: The results will be reported as a numerical value with interpretation.

CMV–IgG (Result & Interpretation)		CMV-IgM (Result & Interpretation)	
<0.6	Negative	<30	Negative
≥0.7	Positive	≥35	Positive
0.60 – 0.69	Equivocal	30 – 34.9	Equivocal

Expected values: **Negative** – No exposure to CMV. No detectable IgG or IgM antibodies present.

Interpretation:

IgM Result	**IgG Result**	**Interpretation**
Negative	Negative	Patient not exposed or too early
Positive	Negative or Positive	Acute or recent infection
Negative	Positive	Immunity from past exposure, not acute disease

Equivocal Result: “Borderline result” – suggest repeat specimen be obtained in 7-14 days.

Critical Values: N/A

Limitations: Samples collected early in the course of a CMV infection may not have detectable levels of antibody. In such cases, it is recommended that a second serum sample be obtained 10-21 days later.

Positive results on CMV-IgG antibody in neonates should be interpreted with caution, since maternal IgG is transferred passively from mother to baby before birth. IgM assays are generally more useful indicators of infection in children below the age of 6 months.

Methodology: Chemiluminescent Immunoassay (CLIA)

References:

Liaison® CMV IgG (310740) (February 2009) Directions for Use, DiaSorin, Inc., Stillwater, MN 55082

Liaison® CMV IgM (310750) (February 2009) Directions for Use, DiaSorin, Inc., Stillwater, MN 55082

NCCLS Guideline I/LA 18-A2 (September 2001) Specifications for Immunological Testing for Infectious Diseases; Approved Guideline-Second Edition, Vol 21, No 15

Update: 9/12/2005: Testing turnaround time previously listed as 1-6 days, testing performed 1 time per week.
8/29/2011: Testing method change, previously listed as ELISA. Note updated reference ranges.
2/9/2016: Update container types