



TEST: Rubeola IgG (Measles) Antibody

PRINCIPLE:

Measles (Rubeola) is a highly contagious acute disease. The incubation period is 10 to 11 days and the infection is characterized by fever, myalgias, nonproductive cough, conjunctivitis and exanthema and enanthem (Koplik's spots). The rash of rubeola almost always begins on the face and then spreads to the trunk and extremities. Typically, the illness crests on day three of the fever and the temperature falls to normal on day seven. With the widespread introduction of vaccines, the incidence of measles has been dramatically reduced.

This test is to aid in the assessment of the patient's immunological response to measles. The presence of specific antibodies in a single specimen indicates past measles infection or vaccination. Demonstration of a significant increase in antibody titers in a serum pair taken at a 7-14 day interval is the basis for diagnosis of acute infection.

SPECIMEN REQUIREMENTS: 2 ml serum from blood collected in red top tube without additive or in a serum separator tube with gel barrier. Separate the serum from the clot to avoid hemolysis: red top tube – transfer serum into plastic transport vial, gel tube – spin. Transport to the lab at room temperature. Store at room temperature for up to 8h, refrigerate for up to 48h. Store frozen at -20°C or below for up to 30 days. Avoid repeated freeze-thaw cycles.

METHOD: ELISA.

REFERENCES:

1. Snyder, R.C., Gaskins, S. E. and Pieroni, R.E. 1988. Rubeola. Amer. Fam. Phys. 37: 175-178.
2. Carter, M. J. and ter Meulen, V. 1987. Measles. In: Principle and Practice of Clinical Virology. Zuckerman, A.J., Bantavala, J. E. and Pattison, J. R. (eds). John Wiley and Sons Ltd., New York, p.291-314.
3. Salmi, A. A. Measles Virus. In: Manual of Clinical Microbiology. Baron, E.J., Pfaller, M.A., Tenover, F.C. and Tenover, R. H. (eds). 6th Edition, ASM Press, Washington, DC. p. 956-962.
4. Bio-Rad Measles IgG EIA, www.bio-rad.com/webroot/web/pdf/cdg/literature/J-110A_Measles.pdf

NORMAL RANGE: Not Applicable

RESULTS AND INTERPRETTION:

Index Value	Interpretation
< 0.9	NEGATIVE for measles IgG, presumed NON-IMMUNE to measles infection
≥ 0.9 and < 1.1	EQUIVOCAL. Another specimen should be tested 10 to 14 days later in parallel with the initial specimen. If the second specimen is Equivocal, the individual is negative for primary or recent measles infection and Equivocal for antibody status. If the 2nd sample is positive, the individual can be considered to have a primary infection.
≥ 1.1	POSITIVE for measles IgG, presumed IMMUNE to measles infection

Turnaround time: One Week