

**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, myalgia, nonproductive cough, exanthema and enanthem (Koplik's spots). The rash of measles usually begins on the face and then spreads to the trunk and extremities. Typically, the illness crests on day three of the fever and temperatures 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 results obtained with the Measles IgG test serve only as an aid to diagnosis and should not be interpreted as diagnostic in themselves. A single positive result only indicates previous immunological exposure, which is either measles infection or vaccination. Demonstration of a significant increase in index value in a serum pair taken at 7-14 days interval is the basis for diagnosis of acute infection.

**SPECIMEN REQUIREMENTS:**

2 mL serum from blood collected in a red top tube without additive or in a serum separator tube with gel barrier. Serum should be separated from the clot to avoid hemolysis: red top tube – transfer serum into plastic transport vial, gel tube – spin. Send to the lab at room temperature. If specimens not tested within 8 hours, refrigerate (2-8°C) for up to 48 h. Store frozen at -20°C or below if not tested within 48 h. Avoid repeat freeze-thaw cycles. Hemolyzed or grossly contaminated/icteric samples are not acceptable for the assay.

**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: Principles and Practice of Clinical Virology. Zuckerman, A.J., Bantavala, J.E. and Pattison, J.R. John Willey 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 Youlken, R.H. (Eds). 6<sup>th</sup> 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](http://www.bio-rad.com/webroot/web/pdf/cdg/literature/J-110A_Measles.pdf)

**NORMAL RANGE:** Not applicable

**RESULTS & INTERPRETATION:**

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:** 1 week