

(Catalog BMG-120 and BMM-120)

Performance Characteristics

SENSITIVITY

The indirect immunofluorescence antibody assay (IFA) for Babesia microti was described in the literature in 1978¹ and has served thereafter as the most common method for serodiagnosis. The Fuller Laboratories test uses Babesia microti-(GI strain)-infected hamster or mouse erythrocytes as the antigen substrate.

Specific IgM antibody is often detectable at the onset of parasitemia, with IgG detection following within 1-2 weeks. Due to the wide variety of antigens present on the whole organism by the IFA technique, sensitivity is approximately equal to Western immunoblot assay using whole cell lysates⁴. Sensitivity of the igM test is 91% and IgG 39% in the acute phase. In convalescent phase sera the sensitivity rises to a range of 88-96%, depending upon testing the center performing the assay¹⁻⁴...

SPECIFICITY

There have been no reports of crossreactivity in the IFA procedure, with the exception of related Babesia spp. Specificity has been reported as 90-100% in a comparison of test centers², with IgM reported as 99% specific^{3.} Sera from a nonendemic region were tested in-house, 94 from Southern California. There were no positives (100% specific).

References

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