



Leptospirosis IFA Kits

(Catalog LEM-120 and LED-120)

Performance Characteristics

The indirect immunofluorescence antibody assay (IFA) for human leptospirosis was initially described in 1966¹. In 1987-1988 the clinical testing for a commercial IHA format demonstrated a close correlation with IFA-IgM data, although the IFA was not an established format at the time. However, beginning in 1995 a series of papers from endemic areas of southeast Asia^{2,4,5,7}, India³ and Colombia⁶ demonstrated the excellent sensitivity and specificity of the IFA-IgM.

In comparisons with the microscopic agglutination test (MAT \geq 1:100) the IFA-IgM was more sensitive and 97% specific². In a 4-way comparison the sensitivities of IFA, MAT, Dipstick and Latex assays were 91.9, 76.6, 77.4 and 83.1, respectively. The specificities were 100.0, 100.0, 89.3 and 83.5, respectively.⁷

The following chart is a comparison of cut-off levels in Thailand ((MAT \geq 1:100)).⁴

Sensitivity

Cut-off titer	IFA
1:100	97.9%
1:200	94.7%
1:400	86.2%

Specificity

Cut-off titer	IFA
1:100	88.0%
1:200	95.3%
1:400	98.9%

In a study of canine seroprevalence the IFA at 1:100 (high dilution) was determined to be 95% sensitive and 92% specific compared with the standard MAT, although the IFA detected more seropositive dogs.⁸

References

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