DATA SHEET

Anaplasma phagocytophilum

PERFORMANCE CHARACTERISTICS

Sensitivity

The indirect immunofluorescence antibody assay (IFA) for *Anaplasma phagocytophila* has been used for over 25 years. In the case of naturally-infected animals and humans, the appearance of diagnostic antibody often lags behind the appearance of clinical signs, with the majority of (acute) sera negative at presentation Within 1-2 weeks most subsequently seroconvert to high titers. The fırst Fuller Laboratories IFA product was introduced in 1995 and utilized the MRK equine strain grown in KG-1 cells. Comparison between this former substrate and the current NCH-1 isolate grown in HL60 cells (25 positive and 25 negative sera) demonstrates 100% concordance. Correlations of IFA protocols with Western Immunoblot (WB) techniques demonstrate IFA sensitivity between 80-100% 3~. An inhouse series of 48 dog sera from the state of New York showed complete (100%) concordance between IFA and WB on 20 positive sera and 28 negative.

Specificity

With the incorporation of *Ehrlichia equi, Ehrlichia phagocytophila* and the HE Agent into the species Anaplasma phagocytophila comb. nov. , there are few close relatives to this combined species. By IFA there have been reports of human serum crossreactivity with Ehrlichia chaffeensis. There are no sources of crossreactivity outside the tribe Ehrlichiae. Canine sera from a non-endemic region, metropolitan Southern California, were tested as a source of negative sera. Of 58 sera tested, all (58/58) were negative (100% specificity).

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