

IFA Test for Canine Brucellosis

VMRD | Nov 1995

Brucella canis IFA substrate slides were used in parallel with the tube agglutination test (TAT) to test 488 canine samples submitted to the Texas Veterinary Medical Diagnostic Laboratory (TVMDL), Serology Section. Results are listed in the table below. FITC-labeled anti-dog IgG (heavy and light chain) was used as the second antibody. Sera were screened at 1/50 dilution. Sensitivity and specificity compared to the tube agglutination test were 93% and 98%, respectively. Predictive value positive and predictive value negative were 90% and 99%, respectively. Of the seven false positive reactions, five were so at 1/50 dilution but negative at 1/100 dilution. As a hedge against false positive reactions, we recommend the use of IgG-specific FITC-labeled second antibody without light chain activity in order to avoid reactions with potentially spurious IgM. We also recommend a specific confirmatory test, such as AGID, to confirm positive reactions.

Data from 1/50 Screening Dilution:

		FA		Total
		+	-	
TAT	+	56	4	60
	-	7	421	428
	Total	63	425	488

Se: 93% Sp: 98%

Using IFA, TVMDL considers samples positive at 1/100 to be suspect and at 1/200 to be serologically positive for Canine Brucellosis.