FLASH VetID™ B. vogeli

Widespread and often mild, but easy to miss on a blood smear



Fast test for the qualitative detection of DNA of *Babesia canis vogeli* in whole blood of the dog.

40 minutes	50 µL EDTA whole blood	Room temperature	12 months
TOTAL ASSAY TIME	SAMPLE	STORAGE	SHELF LIFE (FROM MFG)

Detects DNA directly – published blood smear detection rates for *B. vogeli* have been as low as ~12%
Aids to select the appropriate combination drug therapy

Clinical suspicion:

- Lethargy, fever, pale mucous membranes or icterus in a dog with tick exposure
- Puppies under approximately 4 months showing severe anaemia or unexplained deterioration
- Pigmenturia (dark or red-tinged urine)
- More pronounced fever, anaemia or thrombocytopenia than expected, suggesting possible coinfection with *Ehrlichia canis*
- Splenectomised, immunosuppressed, or chronically ill dogs with unexplained anaemia

Screening / prevention programs:

- Blood donor screening – PCR-negative status before donation
- Dogs in endemic regions with inconsistent or no tick prevention
- Pre-splenectomy or pre-immunosuppression screening
- Monitoring known carriers or previously treated dogs for relapse



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The Pathogen and Transmission

Babesia canis vogeli is an intraerythrocytic protozoan and the most commonly reported large *Babesia* species in dogs worldwide. Its distribution tracks closely with the brown dog tick complex (*Rhipicephalus sanguineus* sensu lato and related lineages), a vector well adapted to kennels and household environments – meaning year-round indoor risk, not just outdoor exposure. Dogs are the intermediate host; the tick is the definitive host in which the parasite completes its sexual stage.

Species-Specific Manifestations

Adult dogs commonly have mild or subclinical infection; but puppies under 3–4 months, immunosuppressed, or splenectomised dogs, and dogs with underlying disease are at greater risk of severe anaemia and death. Coinfection matters: experimental work shows dogs coinfected with *B. vogeli* and *Ehrlichia canis* develop higher fever, more severe anaemia, and lower platelet counts than either infection alone.

The Diagnostic Value Proposition

Blood smear sensitivity is particularly poor for *B. vogeli* – in one study, smear detected only 11.9% of confirmed cases against a PCR rate of 14.47%, and species-specific PCR has reached 100% sensitivity and specificity in validation studies. Treatment with imidocarb often improves clinical signs without necessarily clearing infection, so dogs may remain long-term carriers. Molecular testing and clinical improvement confirm both initial infection and post-treatment status.

+ Positive Result

Confirms *B. vogeli* DNA. With compatible signs, supports a diagnosis of babesiosis – begin treatment and monitor closely, particularly in puppies, coinfected or immunosuppressed dogs.

– Negative Result

Likelihood of active infection is low. Low-level parasitaemia can still be missed; resample if clinical suspicion remains high.

Gold-standard confirmation

For atypical or complicated cases, or to confirm post-treatment clearance, follow up with laboratory qPCR.

Differential diagnostics

Consider testing alongside with FLASH VetID™ B. gibsoni and FLASH VetID™ B. canis where regionally relevant, and FLASH VetID™ E. canis and FLASH VetID™ A. platys for coinfecting tick-borne pathogens.