FLASH VetID™ B. canis

Severity driven by the body's own response, not just parasite load

Fast test for the qualitative detection of DNA of *Babesia canis canis* 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 – more sensitive than blood smear, especially in low-level or chronic infection
Aids to select the appropriate combination drug therapy

Clinical suspicion:

- Lethargy, fever, pale or icteric mucous membranes, and red-tinged urine after tick exposure
- Rapid, severe (peracute or acute) onset with vomiting and anorexia
- Suspected complications: unusual bleeding, neurologic signs, or signs of organ dysfunction
- Recent travel to or residence in an endemic area with confirmed tick exposure
- Unexplained thrombocytopenia and anaemia occurring together

Screening / prevention programs:

- Blood donor screening in endemic areas
- Dogs travelling to or returning from endemic regions
- Kennel or hunting-dog populations with high tick exposure
- Post-treatment monitoring for persistence or relapse

FLASH DIAGNOSTICS

FLASH VetID™ B. canis

The Pathogen and Transmission

Babesia canis senso stricto is the classical large canine piroplasm across much of Europe, transmitted principally by *Dermacentor reticulatus*. Experimental work has demonstrated transmission within as little as 8 hours of tick attachment, meaning prompt tick removal alone is not a reliable safeguard – fast-acting preventive products matter just as much.

Species-Specific Manifestations

Disease ranges from subclinical to peracute and fatal. The typical acute presentation follows a 1–3 week incubation: lethargy, fever, anorexia, jaundice and red-coloured urine. Severity is driven less by parasite burden alone than by the host's inflammatory response – systemic inflammatory response syndrome (SIRS), acute kidney injury, disseminated intravascular coagulation (DIC), and multi-organ dysfunction are the major drivers of poor outcome. In one recent species-confirmed case series, thrombocytopenia and anaemia were near-universal findings, with overall mortality around 15%.

The Diagnostic Value Proposition

Nucleic acid detection is more sensitive than blood smear, particularly in low-level or chronic infection, and provides species confirmation that morphology alone cannot. Antibody testing is not useful for ruling out early disease, since detectable titres typically take about two weeks to develop. Clinical improvement after treatment does not guarantee parasitological cure – documented treatment failures support confirming clearance by PCR rather than assuming cure from symptom resolution alone.

+ Positive Result

Confirms *B. canis canis* DNA. With compatible signs, supports a diagnosis of babesiosis. Begin treatment and supportive care, and monitor closely for renal, cardiac or coagulation complications.

– Negative Result

Likelihood of active infection is low, but does not rule out very early disease before detectable parasitaemia, or low-level persistence after treatment; correlate with CBC and clinical signs.

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