



"Ready & Easy-to-use" kits.
Lyophilised product



Transport and storage at room temperature.
Shelf-life: 24 months



CE marked

TROPICAL & VECTOR-BORNE

TBD
MULTIPLEX

Tick Borne Diseases

- ▶ Tick Borne diseases comprise a group of infections transmitted to humans by the bite of ticks infected with bacteria, viruses, or parasites. The most common tick-borne diseases that affect humans include::

Lyme disease (or Lyme borreliosis) is the most common Tick Borne disease worldwide.

Tick-borne relapsing fever (TBRF), caused by bacteria of the genus *Borrelia*, such as *Borrelia miyamotoi* and *Borrelia hermsii*.

Anaplasmosis is caused by the bacterium *Anaplasma phagocytophilum* and is transmitted to humans through ticks of the genus Ixodes.

Q fever is a zoonosis caused by the bacteria *Coxiella burnetii*.

Babesiosis is produced by many species of protozoa of the genus *Babesia*, mainly *Babesia microti* and *Babesia divergens*.

Ehrlichiosis is due to different species of bacteria of the genus *Ehrlichia*.

Tick Borne encephalitis is produced by the Tick Borne encephalitis virus (TBEV) of the family *Flaviviridae*.

Spotted fever is caused by bacteria of the genus *Rickettsia* and is widely distributed by different geographical areas, being able to transmit depending on it by different ticks.

- ▶ Since most Tick Borne diseases show similar symptoms, diagnosis can be problematic. Real-time PCR assays have been shown to be a sensitive and specific diagnostic tool for the detection of the causative agent.

Tick Borne Diseases

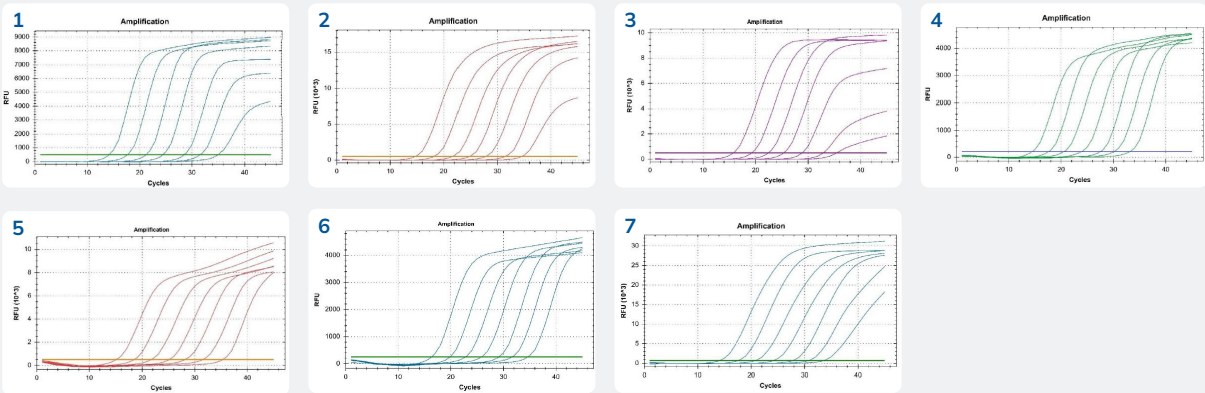
VIASURE Tick Borne Diseases Real Time PCR Detection Kit is designed for the specific identification and differentiation of viral RNA or genomic DNA specific for *Tick Borne Encephalitis Virus (TBEV)*, *Rickettsia spp.*, *Babesia microti*, *Babesia divergens*, *Ehrlichia chafeensis*, *Ehrlichia muris*, *Borrelia burgdorferi sensu lato (s.l.)*, *Borrelia miyamotoi* and/or *Borrelia hermsii*, *Anaplasma phagocitophylum* and/or *Coxiella burnetii* in blood, serum, tissue samples and microbiological culture from ticks, biopsy skin, cerebrospinal fluid (CSF) and synovial fluid from patients with signs and symptoms of Tick Borne diseases.

This test is intended for use as an aid in the diagnosis of Tick Borne diseases in combination with clinical and epidemiological risk factors.

RNA/DNA is extracted from clinical specimens, multiplied using Real Time amplification and detected using fluorescent reporter dye probes specific to detect these infections.

Analytical sensitivity

VIASURE Tick Borne Diseases Real Time PCR Detection Kit has a detection limit of ≥ 10 RNA/DNA copies per reaction (Figure 1, 2, 3, 4, 5, 6 and 7). Template run on the Bio-Rad CFX96™ Real-Time PCR Detection System. Dilution series of:



1. *Borrelia burgdorferi / Borrelia miyamotoi / B. hermsii* (10^7 - 10^1 copies/rxn)
2. *Anaplasma phagocitophylum* (10^7 - 10^1 copies/rxn).
3. *Coxiella burnetii* (10^7 - 10^1 copies/rxn).
4. *Rickettsia spp* (10^7 - 10^1 copies/rxn).
5. *Babesia microti / Babesia divergens* (10^7 - 10^1 copies/rxn).
6. *Ehrlichia chafeensis / Ehrlichia muris* (10^7 - 10^1 copies/rxn).
7. *TBEV* (10^7 - 10^1 copies/rxn).

References - VIASURE Tick Borne Diseases Real Time PCR Detection Kit

6 x 8-well strips, low profile	VS-TBD106L	6 x 8-well strips, high profile	VS-TBD106H
12 x 8-well strips, low profile	VS-TBD112L	12 x 8-well strips, high profile.....	VS-TBD112H
96-well plate, low profile	VS-TBD113L	96-well plate, high profile.....	VS-TBD113H
9 x 4-well strips, Rotor-Gene®	VS-TBD136		

For more information and use procedure, read the instructions for use included in this product.