

What Markers are Included in the Tickborne Complete 1.0 Panel?

Lyme Plus TBRF	Coinfections 1
IgG & IgM Borrelia burgdorferi VlsE1 Borrelia burgdorferi C6 peptide Borrelia burgdorferi p18 (DbpB) Borrelia burgdorferi p23-25 (OspC) Borrelia burgdorferi p28 Borrelia burgdorferi p30 Borrelia burgdorferi p31 (OspA) Borrelia burgdorferi p34 (OspB) Borrelia burgdorferi p39 (BmpA) Borrelia burgdorferi p41 Borrelia burgdorferi p45 Borrelia burgdorferi p58 Borrelia burgdorferi p66 Borrelia burgdorferi p83-93 Borrelia burgdorferi B31 WCS Borrelia burgdorferi 297 WCS Borrelia mayonii Borrelia afzelii BmpA Borrelia afzelii DbpA Borrelia afzelii OspA Borrelia afzelii OspC Borrelia afzelii p100 Borrelia garinii DbpA Borrelia garinii OspC Borrelia bavariensis DbpA Borrelia bavariensis p58 Borrelia bavariensis VlsE1 Borrelia spielmanii DbpA Borrelia spielmanii OspC Borrelia hermsii Borrelia turicatae Borrelia miyamotoi Borrelia andersonii Borrelia maritima Borrelia californiensis Borrelia bissettae Borrelia lusitaniae Borrelia valaisiana Borrelia yangtzensis Borrelia turcica	IgG & IgM Babesia microti IRA Babesia microti p32 Babesia microti p41 Babesia microti WCS Babesia duncani Bartonella henselae 17 kDa Bartonella henselae 26 kDa Bartonella henselae SucB Bartonella elizabethae Bartonella vinsonii Bartonella quintana Anaplasma phagocytophilum Msp5 Anaplasma phagocytophilum Msp2 (p44) Anaplasma phagocytophilum OmpA Ehrlichia chaffeensis
PCR Borrelia andersonii Borrelia maritima Borrelia californiensis Borrelia bissettae Borrelia lusitaniae Borrelia valaisiana Borrelia yangtzensis Borrelia turcica Borrelia burgdorferi Borrelia mayonii Borrelia afzelii Borrelia garinii Borrelia bavariensis Borrelia spielmanii Borrelia hermsii Borrelia turicatae Borrelia lonestari Borrelia miyamotoi	PCR Babesia microti Babesia duncani Bartonella henselae Bartonella elizabethae Bartonella vinsonii Bartonella quintana HGA Anaplasma phagocytophilum HME Ehrlichia chaffeensis

Why Vibrant?



Vibrant Testing Methodology

- **Direct and Indirect Testing** - Vibrant Tickborne 1.0 includes both direct (PCR) and indirect (antibodies) testing for the most comprehensive Lyme and co-infection detection.
- **Enhanced Antibody Testing**
 - **Chemiluminescence Assay** - The chemiluminescence-based assay enables the detection of lower levels of antibodies in comparison to the standard ELISA testing.
 - **ImmunoChip Technology** - Vibrant's ImmunoChip platform allows for high numbers of test markers yielding comprehensive, cost-effective testing.
 - **Enhanced IgM for Early Detection** - The Tickborne test panels have a novel assay which strips away excess IgG proteins that can interfere with IgM antibody/antigen binding. This technology enhancement improves IgM sensitivity.
 - **Enhanced PCR Testing** - Chip-based multiplex PCR allows for increased sensitivity due to multiple target genes.
 - Enhances sensitivity due to features such as nested amplifications and bead beating for biofilm reduction and to increase organism detection compared to traditional methods.
- **Unparalleled Lyme Disease Test Sensitivity and Specificity**
 - The alternative diagnostic criteria in Vibrant's Tickborne test for Lyme disease yielded 100% sensitivity and 95.2% specificity rates in published research.³
 - Vibrant is the only lab to have completed all four rounds of CDC sample validation, including both non-blinded and blinded sample verification.
 - Vibrant is a CLIA-certified and CAP-accredited lab.

