

# 2311020545 - TICKBORNE DISEASES 2.0 DEMO

FINAL REPORT

Accession ID: 2311020545

Name: 2311020545 - TICKBORNE DISEASES 2.0 DEMO  
Date of Birth: 01-01-1111  
Gender: Male  
Age: 01  
Height:  
Weight:  
Fasting: UNKNOWN

Telephone: 000-000-0000  
Street Address:  
Email:

## Provider Information

Practice Name: DEMO CLIENT, MD  
Provider Name: DEMO CLIENT, MD  
Phlebotomist: 0  
Telephone: 000-000-0000  
Address: 3521 Leonard Ct, Santa Clara, CA 95054

## Report Information

Current Result Previous Result In Control Moderate Risk

## Specimen Information

Sample Type	Collection Time	Received Time	Report	Final Report Date
Serum	2023-11-14 00:00 (PDT)	2023-11-15 11:54 (PDT)	Tickborne Diseases 2.0 - P2	2023-11-26 15:28 (PDT)
EDTA	2023-11-14 00:00 (PDT)	2023-11-15 11:54 (PDT)	Tickborne Diseases 2.0 - P2	2023-11-26 15:28 (PDT)



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## INTRODUCTION

Vibrant Wellness is pleased to present Tickborne panel to help you make healthy lifestyle, dietary and treatment choices and aid in the diagnosis of tickborne diseases in consultation with your healthcare provider. The Vibrant Tickborne Diseases panel tests for IgG and IgM antibodies for Borreliosis/Lyme disease as well as co-infection(s) and opportunistic infections with other tick-borne illnesses along with detection of DNA of the species causing these infections.

### Methodology:

The Vibrant Tickborne ImmunoChip test is a semiquantitative assay that detects IgG and IgM antibodies in human serum/DBS for the tickborne microorganisms with multiplexed chemiluminescence immunoassay (CLIA) methodology. The Tickborne PCR Test is a real-time PCR Assay based on probe-based qPCR and RT-qPCR designed for qualitative detection of infectious group-specific DNA in clinical samples.

### Interpretation of Report:

The Tickborne Summary provides concise information on all organisms with representing the list of antigens with positive serology antibody titers that are outside the normal reference range and/or any detected results of the PCR testing for all analytes tested. Reference ranges have been established using a cohort of 2000 apparently healthy individuals. While the summary table provides a quick snapshot of the analytes tested, providers are encouraged to review the comments provided following the summary for a detailed description of the analytes and the tickborne interpretation guideline available in the portal.




This is followed by a complete list of all analytes tested including PCR results IgG and IgM titers for all organisms. For antibody results, the classification of Green denotes a results that is within the normal reference range, the classification of Yellow denotes a result that is moderately elevated titer with respect to the reference range and the classification of Red denotes a result that is elevated with respect to the normal reference range. Additionally, the previous value (if available) is also indicated to help check for improvements every time the test is ordered. The PCR panel reports results as Detected or Not Detected. As with all testing, results should be interpreted considering a patient's history, physical examination, and/or results of other diagnostic testing.

The Vibrant Wellness platform provides tools for you to track and analyze your general wellness profile. Testing for the Tickborne panel is performed by Vibrant America, a CLIA certified lab CLIA#:05D2078809 and Vibrant Genomics, a CLIA certified lab CLIA#: 05D2098445. Vibrant Wellness provides and makes available this report and any related services pursuant to the Terms of Use Agreement (the "Terms") on its website at [www.vibrant-wellness.com](http://www.vibrant-wellness.com). By accessing, browsing, or otherwise using the report or website or any services, you acknowledge that you have read, understood, and agree to be bound by these terms. If you do not agree to these terms, you shall not access, browse, or use the report or website. The statements in this report have not been evaluated by the Food and Drug Administration and are only meant to be lifestyle choices for potential risk mitigation. Please consult your healthcare provider for medication, treatment, diet, exercise, or lifestyle management as appropriate. This product is not intended to diagnose, treat, or cure any disease or condition. Vibrant Wellness does not provide clinical consultations for Lyme Disease treatments.

### Please note:

It is important that you discuss any modifications to your diet, exercise, and nutritional supplementation with your healthcare provider before making any changes.

# Tickborne Diseases 2.0 - Summary

Panel Name	Organism	Positive Serology		
		IgG	IgM	PCR
Epstein Barr Virus	 Epstein Barr Virus	EBNA1, VCA gp125		
Herpes simplex virus 1	 Herpes simplex virus 1	HSV-1		
Streptococcal A	 Streptococcal A	Streptococcal A		

SAMPLE

## Tickborne Diseases 2.0

### Epstein Barr Virus

#### Epstein Barr Virus

The Epstein–Barr virus, also called human herpesvirus 4 (HHV-4), is one of the causes of infectious mononucleosis (glandular fever). It is a double-stranded, enveloped, linear DNA virus. Lyme disease and infectious mononucleosis are common illnesses that share similar clinical presentations and hence its useful to test together.

### Herpes simplex virus 1

#### Herpes simplex virus 1

Herpes simplex virus 1 is a member of the herpesvirus family that can infect humans. It mostly produces cold sores and is ubiquitous and contagious. As a neurotropic and neuroinvasive virus, HSV-1 persists in the body in its latent form and is hiding from the immune system in the cell bodies of neurons. Seropositivity to HSV-1 antibodies have been reported with increased risk for Alzheimer's disease. Disseminated Lyme Disease has been shown to be presenting with nonsexual acute genital ulcers and Lyme disease should be considered in women presenting with acute-onset genital ulcers.

### Streptococcal A

#### Streptococcal A

Antibodies to Streptococcal A are indicative of current or recent strep infection. In PANDAS (Pediatric Autoimmune Neuropsychiatric Disorders Associated with Streptococcal Infections) researchers suggest that antibodies produced to the infection may lead to the PANDAS symptoms. Strep bacteria are very ancient organisms that survive in the human host by hiding from the immune system as long as possible. They hide themselves by putting molecules on their cell wall so that they look nearly identical to molecules found on the child's heart, joints, skin, and brain tissues. This hiding is called "molecular mimicry" and allows the strep bacteria to evade detection for a long time. However, the molecules on the strep bacteria are eventually recognized as foreign to the body and the child's immune system reacts to the molecules by producing antibodies. Because of the molecular mimicry by the bacteria, the immune system reacts not only to the strep molecules but also to the human host molecules that were mimicked; antibodies "attack" the mimicked molecules in the child's own tissues. These antibodies that react to both the molecules on the strep bacteria and to similar molecules found on other parts of the body are an example of "cross-reactive" antibodies. Studies at the National Institute of Mental Health (NIMH) and elsewhere have shown that some cross-reactive antibodies target the brain—causing OCD, tics, and the other neuropsychiatric symptoms of PANDAS.

# Tickborne Diseases 2.0

PCR					
Parvovirus B19 PCR		Current	Previous	Toxoplasma gondii PCR	
Parvovirus B19		NOT DETECTED		Toxoplasma gondii	
				NOT DETECTED	

Cytomegalovirus				Reference Range: <span>In Control: ≤10</span> <span>Moderate: 10.1-20</span> <span>Risk: &gt;20</span>		
Test Name	IgG	Current	IgM	IgG	Previous	IgM
Cytomegalovirus EIA Antigen	4.3		6.5			
Cytomegalovirus GlyB	6.4		2.7			
Cytomegalovirus p150	3.8		7.3			
Cytomegalovirus p28	5.4		3.9			
Cytomegalovirus p52	0.9		2.4			
Cytomegalovirus p65	0.8		2.3			
Cytomegalovirus p38	1.3		5.0			

Epstein Barr Virus				Reference Range: <span>In Control: ≤10</span> <span>Moderate: 10.1-20</span> <span>Risk: &gt;20</span>		
Test Name	IgG	Current	IgM	IgG	Previous	IgM
Epstein Barr Virus EA Antigen	5.1		5.4			
Epstein Barr Virus EBNA1	13.9		1.8			
Epstein Barr Virus VCA gp125	>30		5.1			
Epstein Barr Virus p18	6.9		6.2			
Epstein Barr Virus p23	0.7		4.2			

Parvovirus B19				Reference Range: <span>In Control: ≤10</span> <span>Moderate: 10.1-20</span> <span>Risk: &gt;20</span>		
Test Name	IgG	Current	IgM	IgG	Previous	IgM
Parvovirus B19 VLP VP2	3.2		2.3			
Parvovirus B19 VLP VP1/Vp2 Co Capsid	4.7		4.3			

# Tickborne Diseases 2.0

## Toxoplasma gondii

Reference Range: In Control: ≤10 Moderate: 10.1-20 Risk: >20

Test Name	IgG	Current	IgM	IgG	Previous	IgM
Toxoplasma gondii Crude Extract	3.7		2.6			
Toxoplasma gondii MIC3	4.0		6.3			
Toxoplasma gondii p24	4.1		2.6			
Toxoplasma gondii p29	5.1		3.0			
Toxoplasma gondii p30	3.9		2.4			

## Herpes simplex virus 1

Reference Range: In Control: ≤10 Moderate: 10.1-20 Risk: >20

Test Name	IgG	Current	IgM	IgG	Previous	IgM
HSV-1	12.0		1.2			

## Herpes simplex virus 2

Reference Range: In Control: ≤10 Moderate: 10.1-20 Risk: >20

Test Name	IgG	Current	IgM	IgG	Previous	IgM
HSV-2	2.8		3.5			

## Human herpesvirus 6

Reference Range: In Control: ≤10 Moderate: 10.1-20 Risk: >20

Test Name	IgG	Current	IgM	IgG	Previous	IgM
HHV-6	4.6		2.6			

## Human herpesvirus 7

Reference Range: In Control: ≤10 Moderate: 10.1-20 Risk: >20

Test Name	IgG	Current	IgM	IgG	Previous	IgM
HHV-7	2.1		1.5			

## Streptococcal A

Reference Range: In Control: ≤10 Moderate: 10.1-20 Risk: >20

Test Name	IgG	Current	IgM	IgG	Previous	IgM
Streptococcal A	10.9		6.2			

## Risk and Limitations

This test has been developed and its performance characteristics determined by Vibrant America LLC., a CLIA certified lab and Vibrant Genomics, a CLIA certified lab. These assays have not been cleared or approved by the U.S. Food and Drug Administration. Vibrant Wellness provides additional contextual information on these tests and provides the report in a more descriptive fashion.

Clinical history and current symptoms of the individual must be considered by the healthcare provider prior to any interventions. Test results should be used as one component of a healthcare provider's clinical assessment.

Vibrant Tickborne panel testing is performed at Vibrant America, a CLIA and CAP certified laboratory utilizing ISO-13485 developed technology and Vibrant Genomics, a CLIA certified laboratory. Vibrant America and Vibrant Genomics have effective procedures in place to protect against technical and operational problems. However, such problems may still occur. Examples include failure to obtain the result for a specific test due to circumstances beyond Vibrant's control. Vibrant may re-test a sample to obtain these results but upon re-testing the results may still not be obtained. As with all medical laboratory testing, there is a small chance that the laboratory could report incorrect results. A tested individual may wish to pursue further testing to verify any results.

It should be realized that there are possible sources of error like any lab testing which include sample misidentification, trace contamination of PCR reactions, technical errors and rare genetic variants that may interfere with analysis.

Some individuals may feel anxious about getting their test health results. If the potential user feels very anxious, such user should speak to his or her doctor or other health care professional prior to collection of a sample for testing. Users should consult with their doctor or other health care professional if they have any questions or concerns about the results of their test or their current state of health. Users of the test are also encouraged to discuss their test results with a genetic counselor, board-certified clinical molecular geneticist, or equivalent health care professional.

The information in this report is intended for educational purposes only. While every attempt has been made to provide current and accurate information, neither the author nor the publisher can be held accountable for any errors or omissions. Tested individuals may find their experience is not consistent with Vibrant's selected peer reviewed scientific research findings of relative improvement for study groups. The science in this area is still developing and many personal health factors affect diet and health. Since subjects in the scientific studies referenced in this report may have had personal health and other factors different from those of tested individuals, results from these studies may not be representative of the results experienced by tested individuals. Further, some recommendations may or may not be attainable, depending on the tested individual's physical ability or other personal health factors. A limitation of this testing is that many of these scientific studies may have been performed in selected populations only. The interpretations and recommendations are done in the context of these studies, but the results may or may not be relevant to tested individuals of different or mixed ethnicities.

Vibrant Wellness makes no claims as to the diagnostic or therapeutic use of its tests or other informational materials. Vibrant Wellness reports and other information do not constitute medical advice and are not a substitute for professional medical advice. Please consult your healthcare practitioner for questions regarding test results, or before beginning any course of medication, supplementation, or dietary changes.