

DON'T LET IT GET WORSE

Lyme is called “The Great Imitator,” because its symptoms mimic many other diseases. It can affect any organ of the body, including the brain and nervous system, muscles and joints, and the heart. Patients with Lyme disease are frequently misdiagnosed with chronic fatigue syndrome, fibromyalgia, rheumatoid arthritis, multiple sclerosis, and various psychiatric illnesses, including depression. Testing is recommended at the earliest sign of symptoms.

WHY IGENEX

LONG HISTORY

For over 25 years, **IGeneX** has been at the forefront of research and development of diagnostic tests for Lyme disease, Tick-Borne Relapsing Fever, and other tick-related diseases. We have a dedicated in-house research and development team of tick-borne disease experts who are committed to developing the most precise and effective diagnostic tests for more relevant species and strains of tick-borne pathogens than any other lab.

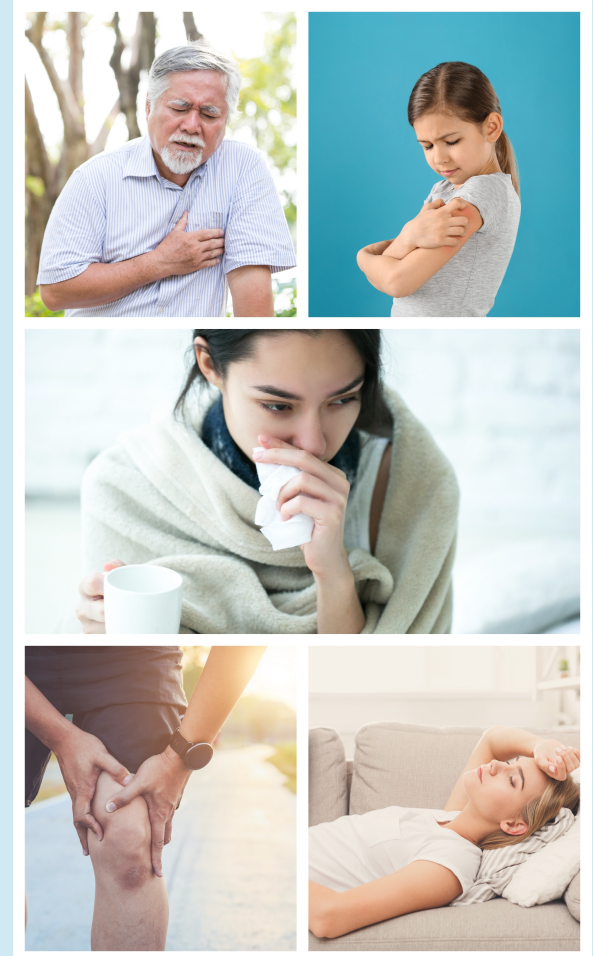
FULLY CERTIFIED

IGeneX is certified by CLIA (Clinical Laboratory Improvements Amendments of 1988) to perform high-complexity tests on human samples. **IGeneX** also holds licenses and permits for individual states that require separate state licensures for performing diagnostic tests on samples from their residents. This demonstrates that **IGeneX** meets the quality of standards at state and federal levels.



Ask your doctor about **IGeneX's** superior testing for Lyme disease.

556 Gibraltar Dr.
Milpitas, CA 95035, USA
US: (800) 832-3200
International: +1 (650) 424-1191
www.igenex.com



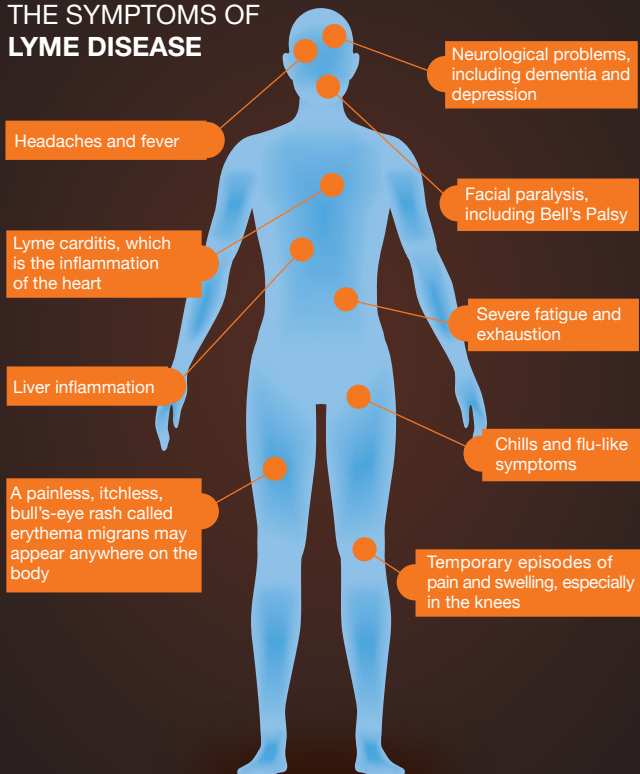
ARE YOUR SYMPTOMS LYME DISEASE?

**CHILLS, MUSCLE PAIN,
HEADACHE, FLU, FATIGUE,
FEVER, JOINT PAIN,
BELL'S Palsy, CARDITIS**

THE SIGNS AND SYMPTOMS OF LYME

- Early disease: some patients report flu-like symptoms: fever, chills, headache, fatigue, muscle and joint aches, and swollen lymph nodes.
- 3 to 30 days after tick bite: characteristic red bulls-eye rash (erythema migrans) may appear.
- Days to months after the bite: migratory pain and/or pain in the tendons, muscles, and bones may occur. Some patients experience heart palpitation/irregular heartbeat, shortness of breath, severe headaches and neck stiffness.
- In some cases there are nervous system abnormalities including but not limited to, short-term memory loss, psychiatric symptoms, partial facial paralysis (Bell's palsy), nerve pain and numbness or tingling in the hands or feet.

THE SYMPTOMS OF LYME DISEASE



UNPARALLELED LYME DISEASE TESTING

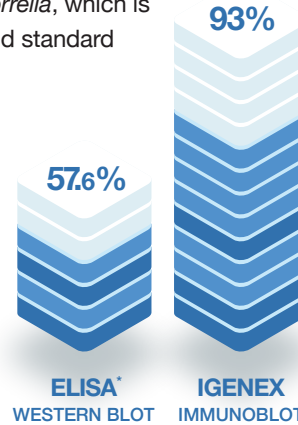
Standard serologies test for only a single *Borrelia* species, *B. burgdorferi* B31. This results in many positive patients being missed. IGeneX offers the ImmunoBlot IgM and IgG tests that detect antibodies to eight different species of *Borrelia*, which is why they have become the gold standard in testing for Lyme disease.

STANDARD TESTS

- ✓ *B. burgdorferi* B31

IGENE X IMMUNOBLOT

- ✓ *B. burgdorferi* B31
- ✓ *B. burgdorferi* 297
- ✓ *B. californiensis*
- ✓ *B. mayonii*
- ✓ *B. afzelii*
- ✓ *B. garinii*
- ✓ *B. spielmanii*
- ✓ *B. valaisiana*



*Source: Waddell LA, Greig J, Mascarenhas M, Harding S, Lindsay R, Ogden N (2016) The Accuracy of Diagnostic Tests for Lyme Disease in Humans, A Systematic Review and Meta-Analysis of North American Research. PLoS ONE 11(12): e0168613.

NEW! BROAD COVERAGE LYME AB ASSAY

- Far broader and more inclusive of Bb sl species than standard serologies
- Replaces both the IgM ELISA and the IgG ELISA
- Provides a simple, cost-effective, yes/no result with no complicated interpretation necessary

MOST POPULAR! IMMUNOBLOT

- Improved sensitivity because it includes specific antigens from eight strains and species of *Lyme borreliae*
- Improved specificity because pure proteins are sprayed at specific positions on the blot
- Superior at all stages of Lyme disease

CO-INFECTION TESTING

The *Ixodes* ticks that transmit *Lyme borreliae*, including *Borrelia burgdorferi*, the bacteria which causes Lyme disease, often carry and transmit other pathogens, known as co-infections. A single tick could make a person sick with several diseases at the same time. The CDC recommends that patients consider testing for co-infections if Lyme-like symptoms persist. In fact, patients can get a co-infection without even getting Lyme. IGeneX offers the following tests for Lyme disease and the co-infections.

DISEASE	TESTS
Lyme disease	ImmunoBlots, IgXSpot, Western Blots, IFA, Serology, PCR, LDA, BCA
TBRF	ImmunoBlots, Western Blots, PCR, BCA
Bartonellosis	IgXSpot, Western Blots, IFA, FISH, PCR
Babesiosis	IFA, FISH, PCR
Rickettsiosis	IFA, PCR
Ehrlichiosis	IFA, PCR
Anaplasmosis	IFA, PCR

HAPPY, HEALTHY PATIENTS

"If we didn't find your lab we would have never know about co-infections! Not only did my son test much higher than the CDC guidelines for Lyme, thanks to your lab we found out he tested higher than CDC guidelines for babesiosis! We are forever thankful to IGeneX."

Cammie E.B.



"This lab was the one and only lab that finally gave me an accurate diagnosis. It was well worth the out of pocket expense. After all of the money that I have spent on ER visits and specialists, it was a drop in the bucket. Thank you for diagnosing my problem!"

Michael C.