IGeneX Inc.

# IGENEX IMMUNOBLOT SETS THE STANDARD

NOW AVAILABLE FOR LYME, TBRF, BARTONELLA AND BABESIA

## FOLLOW THE SCIENCE WHAT MAKES THE IGENEX IMMUNOBLOT SUPERIOR

The IGeneX ImmunoBlot uses recombinant proteins instead of proteins from natural sources. Recombinant DNA technology provides a more efficient method to obtain large amounts of proteins. Additionally, by using recombinant technology, IGeneX scientists are able to create DNA sequences that would not naturally exist under normal circumstances, leading to more sensitive and specific tests.

## ADVANTAGES OF THE IGENEX IMMUNOBLOT

- ✓ Allows for identification of a broad range of species
- ✓ Detects multiple species in one test
- Detects the full spectrum of disease: early, active, and late-stage disease
- Can be made genus and species-specific
- Avoids the need to visualize glass slides through a microscope
- Renders Western blot and IFA obsolete

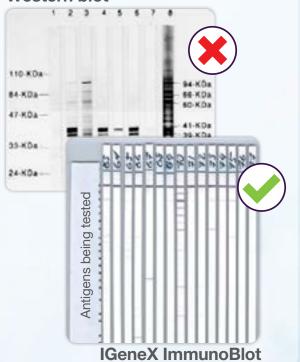
OSITIVE

IGeneX clinical scientists mix a patient's sample with the ImmunoBlot strip to perform the test. A dark purple colored precipitate develops on the antigen-antibody complexes. Quantity and location of the antigens are controlled by a printing-like process, improving consistency and specificity. A sample is considered positive if two or more bands are present.

## THE DIFFERENCE IS

The ImmunoBlot replaces the Western blot. Western blots are blurry, difficult to read, and lead to misdiagnosis. ImmunoBlots are clear, precise, and much easier to interpret.

## Western blot



## FAR BETTER

Common Lyme two-tier testing has a sensitivity of just above 50% because it detects only one *Borrelia* species, *B. burgdorferi* B31.

The IGeneX ImmunoBlot detects antibodies to nine different species of *Borrelia*.



Sources: Waddell LA, Greig J, Mascarenhas M, Harding S, Lindsay R, Ogden N (2016) The Accuracy of Diagnostic Tests for Lyme Disease in Humans. PLoS ONE 11(12): e0168613. Pilot Study of Immunoblots with Recombinant Borrelia burgdorferi Antigens for Laboratory Diagnosis of Lyme

## IGENEX IMMUNOBLOTS ARE AVAILABLE FOR FOUR DISEASES

### Lyme ImmunoBlot

The IGeneX Lyme ImmunoBlot detects antibodies to nine different species of *Borrelia*: *B. burgdorferi* B31, *B. burgdorferi* 297, *B. californiensis*, *B. mayonii*, *B. afzelii*, *B. garinii*, *B. spielmanii*, *B. bissettii* and *B. valaisianaa*. By testing for more species than the traditional ELISA and western blot tests, the IGeneX ImmunoBlot reduces the risks of false negatives.

### **TBRF ImmunoBlot**

Some of the *Borrelia* that causes TBRF are transmitted by the same ticks that transmit *B. burgdorferi*, the causative agent of Lyme disease. Therefore, it is crucial to test for both TBRF and Lyme. The IGeneX TBRF ImmunoBlot detects antibodies to species from North America, European and Australian strains. The most common species are *B. miyamotoi*, *B. hermsii*, and *B. turicatae*.

### **Bartonella ImmunoBlot**

Diagnostic tests for Bartonella, such as IFA, have not been able to detect many of the ever-growing list of species and strains. The IGeneX Bartonella ImmunoBlots are designed to detect IgM and IgG antibodies to multiple Bartonella species including *B. henselae, B. quintana, B. elizabethae, and B. vinsonii.* 

### **Babesia ImmunoBlot**

Babesia is the most common Lyme disease co-infection. The IGeneX Babesia ImmunoBlot tests for the Babesia genus and speciates to multiple species of Babesia that infect humans, including *B. microti* and *B. duncani*. This test is the first ever application of advanced recombinant technology for the serodiagnosis of Babesiosis.

