



TBRF ImmunoBlot

IgM and IgG

Now approved by New York State
Department of Health

PURPOSE

Borreliosis is caused by two groups of *Borrelia*: *B. burgdorferi* group and the Tick-Borne Relapsing Fever (TBRF) *Borrelia* group. It was believed that *B. burgdorferi* group is the only group that causes Lyme-like symptoms. However, we now know that TBRF *Borrelia* too causes Lyme-like symptoms. Symptoms caused by both these *Borrelia* groups are often confused with MS, Chronic fatigue, Osteo-arthritis, and ALS. *B. burgdorferi* is transmitted by hard ticks (*Ixodes*) whereas TBRF *Borrelia* can be transmitted by hard and soft (*Ornithodoros*) ticks. The Tick-Borne Relapsing Fever (TBRF) *Borrelia* immunoblot is designed to detect antibodies to specific antigens of TBRF *Borrelia* in human serum. For diagnostic purposes, immunoblot test results should be used in conjunction with a patient's clinical history, symptoms and other evidence available to the diagnosing physician.

PRINCIPLE

The TBRF ImmunoBlot Test is a qualitative assay that detects TBRF *Borrelia* specific IgM and IgG antibodies in human serum. Recombinant *Borrelia* species antigens are sprayed at specific positions onto a nitrocellulose membrane and cut into strips. These strips are used to detect specific antibodies in patient serum.

PERFORMANCE CHARACTERISTICS

The specificity of the TBRF ImmunoBlot is 98.6% for IgM and IgG based on a study performed on 50 samples provided by the CDC. (This includes 40 samples from patients with other diseases and 10 from healthy controls living in TBRF endemic regions.)

ADVANTAGES

TBRF ImmunoBlot detects antibodies to TBRF *Borrelia* species from North America, European and Australia strains. This is based on our studies on over 500 patient sera. The most common species detected were:

- TBRF *Borrelia* genus
- *B. burgdorferi*
- *B. hermsii*
- *B. turicatae*
- *B. parkerii**
- TBRF spp.

SAMPLE REQUIREMENT: 0.5 ml serum

TEST NUMBER: 345 TBRF ImmunoBlot IgM
346 TBRF ImmunoBlot IgM speciation
355 TBRF ImmunoBlot IgG
356 TBRF ImmunoBlot IgG speciation

CPT CODE: 043U, 044U, 86619, 86609 X3

*Not approved in New York.