TBRF ImmunoBlot
IgM and IgG

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 (Omnithodorus) 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 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 TBRF specific antibodies in patient serum.

PERFORMANCE CHARACTERISTICS

The specificity of the TBRF ImmunoBlot is 92% for IgM and 100% for IgG based on a study performed on 50 samples provided by CDC. (This included 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:

- Borrelia miyamotoi
- B. hermsii
- B. turcica
- B. turicatae
- B. texasensis
- B. coriaceae
- B. parkeri

SAMPLE REQUIREMENT: 0.5 ml serum
TEST NUMBER: 345* TBRF ImmunoBlot IgM 355* TBRF ImmunoBlot IgG
CPT CODE: 86619

*Tests/ Panels not available for NY Residents