



Bartonella

Multi-Species Western Blot

IgM and IgG

PURPOSE

The Bartonella IgM and IgG Western Blots are designed to detect IgM and IgG antibodies to *Bartonella* species including *Bartonella henselae*, *B. quintana*, *B. elizabethae* and *B. vinsonii* antigens in serum of patients suspected of having *Bartonella* infection. For diagnostic purposes, the Bartonella Western Blot test results should be used in conjunction with clinical symptoms and other evidence available to the diagnosing physician.

PRINCIPLE

A blot prepared from cell lysates of 4 species of *Bartonella*: *B. henselae*, *B. quintana*, *B. elizabethae* and *B. vinsonii* is incubated with patient's serum. *Bartonella* specific antibodies, if present in the patient's serum, bind to the corresponding antigen(s) on the blot. After washing off the unbound serum, the blot is incubated with goat anti-human IgG or goat anti-human IgM antibody conjugated with alkaline phosphatase. Bound antibodies react with BCIP/NBT, a chromogenic substrate. A dark purple colored precipitate develops on the antigen-antibody complexes.

PERFORMANCE CHARACTERISTICS

Based on a study performed on 63 well-characterized clinical samples, 32 samples confirmed as being positive for antibodies to *Bartonella* and 31 samples negative for

Bartonella and positive for antibodies to other tick-borne pathogens, the sensitivity of the *Bartonella* Western Blot test is 97% and the specificity is 100%.

ADVANTAGES

- *Bartonella* IgM/IgG Western blot tests have very high sensitivity and specificity for detecting *Bartonella* specific antibodies in patient's serum and speciating *Bartonella* positive samples to *B. henselae*, *B. quintana*, *B. elizabethae* and *B. vinsonii*. Thus, it is a very useful diagnostic tool for *Bartonella* infection.
- Every *Bartonella* species has some *Bartonella* genus specific antigens and some species specific antigens. Therefore, other species will be detected too, but will not be speciated.
- Western Blot results can be obtained in a much shorter time than culture tests, which can take up to a month.

INCLUDED ANTIGENS

- *B. henselae*
- *B. elizabethae*
- *B. quintana*
- *B. vinsonii*

SAMPLE REQUIREMENT: 1.0 ml serum
TEST NUMBER: 351* Bartonella IgM Western Blot
352* Bartonella IgG Western Blot
CPT CODE: 86611 x 8

*Tests/Panels not available for NY Residents