
Lab Dept: Serology

Test Name: TICK- BORNE DISEASE ANTIBODY PANEL

General Information

Lab Order Codes: TBAP (Ab Only); TBPL (orders both [PCR](#) and Ab Testing)

Synonyms: Ehrlichia chaffeensis; Babesia microti; Borrelia burgdorferi; Tick-borne diseases; Anaplasma phagocytophilum; HME (Human Monocytic Ehrlichiosis); HME (Human Monocytic Ehrlichiosis); Lyme disease

CPT Codes: 86618 – Lyme disease
86666 x2 – Ehrlichia chafeensis and Anaplasma phagocytophilum
86753 – Babesia microti
86617 x 2 – Lyme disease Western blot (if appropriate)

Test Includes: Ehrlichia chaffeensis (HME) IgG, Anaplasma phagocytophilum IgG and Babesia Microti Ab IgG reported as a titer.

Lyme disease serology reported as negative (if Lyme disease serology is positive or equivocal, then the Lyme disease antibody confirmation by Western blot will be performed at an additional charge).

Logistics

Test Indications: Useful for evaluation of the most common tick-borne diseases found in the United States, including Lyme disease, human monocytic and granulocytic ehrlichiosis and babesiosis; evaluation of patients with a history of, or suspected, tick exposure who are presenting with fever, myalgia, headache, nausea, and other nonspecific symptoms.

Lab Testing Sections: Serology - Sendouts

Referred to: Mayo Medical Laboratories (MML Test: TICKS)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 2 – 4 days, test performed Monday – Friday

Special Instructions: N/A

Specimen

Specimen Type:	Blood
Container:	SST (Marble, gold or red top tube)
Draw Volume:	3 mL (Minimum: 2.1 mL) blood
Processed Volume:	1 mL (Minimum: 0.7 mL) serum
Collection:	Routine venipuncture
Special Processing:	Lab Staff: Centrifuge specimen, remove serum aliquot into a screw-capped round bottom plastic vial. Store and ship at refrigerated temperatures. Forward promptly. Submitting the minimum specimen volume makes it impossible to repeat the test or perform confirmatory or perform reflex testing. In some situations a minimum specimen volume may result in a QNS (quantity not sufficient) result, requiring a second specimen to be collected.
Patient Preparation:	None
Sample Rejection:	Unlabeled or mislabeled specimens; gross hemolysis; gross lipemia

Interpretive

Reference Range:

Ehrlichia chaffeensis (HME) IgG titer:	<1:64
Anaplasma phagocytophilum IgG titer:	<1:64
Babesia microti Ab IgG titer:	<1:64
Lyme disease serology:	Negative

Critical Values:

N/A

Limitations:

See information for individual diseases.

Methodology:

Immunofluorescence Assay (IFA), Enzyme Immunoassay (EIA)

References:

[Mayo Medical Laboratories](#) July 2013

Updates:

8/22/16: Tube type update.