
Lab Dept: Microbiology/Virology

Test Name: TICK- BORNE DISEASE PANEL PCR, BLOOD

General Information

Lab Order Codes: TPCR (PCR Only), TPBL (Orders both PCR and [Antibody Testing](#))

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

CPT Codes: 87798 x8 – Infectious Agent, Amplified Probe tech, each

Test Includes: Babesia microti, Babesia duncani, Babesia divergens/MO-1, Anaplasma phagocytophilum, Ehrlichia chaffeensis, Ehrlichia ewing/canis, Ehrlichia muris-like and Borrelia miyamotoi PCR.
Note: As of 12/9/2010: Lyme PCR is no longer tested as part of this panel as blood is not deemed an appropriate specimen. Appropriate specimens for Lyme PCR include: CSF, synovial fluid or tissue. See Test listing: [Lyme PCR, CSF or Synovial Fluid](#). Mayo will offer [Lyme PCR, Blood](#) as an individual test for an interim period of time and will eventually discontinue the blood test altogether.

Logistics

Test Indications: Useful for evaluation of the most common tick-borne diseases found in the United States, including 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: TKPNL)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 – 4 days, test performed Monday - Saturday

Special Instructions: N/A

Specimen

Specimen Type:	Whole Blood
Container:	Lavender top (EDTA) tube Note: Green top (heparin) tubes are NOT acceptable.
Draw Volume:	1 mL (Minimum: 0.3 mL) blood
Processed Volume:	Same as Draw Volume
Collection:	Routine venipuncture, invert specimen gently to mix.
Special Processing:	Lab Staff: Do Not centrifuge. Specimen should be sent in original collection container as whole blood. Store and send at refrigerated temperatures. Forward promptly.
Patient Preparation:	None
Sample Rejection:	Unlabeled or mislabeled specimens; specimens other than EDTA plasma; gross hemolysis; gross lipemia

Interpretive

Reference Range:	<p>Babesia species, Molecular Detection PCR:</p> <ul style="list-style-type: none"> - Babesia microti: Negative - Babesia duncani: Negative - Babesia divergens/MO-1: Negative <p>Ehrlichia/Anaplasma, Molecular Detection PCR:</p> <ul style="list-style-type: none"> - Anaplasma phagocytophilum: Negative - Ehrlichia chaffeensis: Negative - Ehrlichia ewingii/canis: Negative - Ehrlichia muris-like: Negative <p>Borrelia myamotoi, Molecular Detection PCR:</p> <ul style="list-style-type: none"> - B.myamotoi: Negative
Critical Values:	N/A
Limitations:	See individual tests
Methodology:	Real-Time Polymerase Chain Reaction (PCR)/DNA Probe Hybridization.
References:	Mayo Medical Laboratories January 2018
Updates:	<p>12/9/2010: Lyme PCR is no longer tested as part of this panel as blood is not deemed an appropriate specimen. Appropriate specimens for Lyme PCR include: CSF, synovial fluid or tissue.</p> <p>1/27/2016: CPT update.</p> <p>10/25/2016: Borrelia miyamotoi added to panel. CPT coding updated.</p>

