

EFFECTIVE JANUARY 3, 2018 THE MICROBIOLOGY / MOLECULAR DIAGNOSTICS DEPARTMENT WILL BE PERFORMING IN-HOUSE TESTING FOR LYME ANTIBODIES

BACKGROUND:

Lyme disease is a tick borne disease caused by *Borrelia burgdorferi*. The disease is seasonal and occurs in three stages. The detection of anti-*Borrelia* IgM antibodies is most effective 3-6 weeks following exposure, whereas anti-*Borrelia* IgG antibodies are detected at a later time and are often detectable for years. Obtaining results for both IgG and IgM is important in offering information on the progression of the disease. The VIDAS test for Lyme IgG and IgM quantifies the serum/plasma level of IgG and IgM by utilizing a two-step enzyme immunoassay sandwich method with a final fluorescent detection using an enzyme-linked fluorescence assay (ELFA) method. The instrument produces a concentration of IgG and IgM that are correlated with a group of values corresponding to a certain level, or risk, of a patient being infected by *B. burgdorferi*.

SPECIMEN REQUIREMENTS:

- Serum Separator Tube (SST), Red-top Tube, Plasma Separator Tube (PST with Lithium Heparin)
- Once serum or plasma is separated from cells, it is stable up to 6 days refrigerated

RESULT INTERPRETATION:

Lyme IgG (LYG) and Lyme IgM (LYM) result interpretation			
LYG Concentration	Interpretation		
Index <0.20	No detectable anti-B. burgdorferi IgG antibodies detected.		
Index ≥0.20	Presumptive detection of anti- <i>B. burgdorferi</i> IgG antibodies. The specimen should be tested further by an IgG Western Blot for supplementary information.		
LYM Concentration	Interpretation		
Index <0.12	No detectable anti-B. burgdorferi IgM antibodies detected.		
0.12 ≤ index <0.32	Imprecise detection of anti- <i>B. burgdorferi</i> IgM antibodies. The specimen should be further tested by an IgM Western Blot for supplementary information.		
Index ≥0.32	Presumptive detection of anti- <i>B. burgdorferi</i> IgM antibodies. The specimen should be tested further by an IgM Western Blot for supplementary information.		

ORDERING: If results are equivocal or positive, Western Blot confirmation is done at an additional charge.

Test	Mnemonic	Test Code	CPT Code(s)
Lyme Antibody, IgG and IgM	LYME ABS*	4500725	86618 x2
Lyme Antibody, IgG	LYME IGG	4500735	86618

^{*}NOTE: LYME ABS replaces the previous LYME AB Mnemonic.

FOR QUESTIONS OR ADDITIONAL INFORMATION, PLEASE CALL:

- Dr. Nathan Ledeboer, Medical Director, Microbiology and Molecular Diagnostics (414-805-7556)
- Dr. Blake Buchan, Associate Medical Director, Microbiology and Molecular Diagnostics (414-805-6988)
- Kristina Georgakas, Operations Director, Microbiology and Molecular Diagnostics (414-805-7558)