

Patient Information	Specimen Information	Client Information

**COMMENTS:**

Test Name	In Range	Out Of Range	Reference Range	Lab
MUSK ANTIBODY TEST INTERPRETATION NEGATIVE This test did not detect abnormal levels of anti-MuSK antibodies. TECHNICAL RESULTS				WAO

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 Interpretive Result Table  
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INTERPRETIVE RESULT: Negative  
 TEST: anti-MuSK  
 TECHNICAL RESULT: <1:10  
 REFERENCE RANGE: Negative <1:10, Borderline 1:10, Positive >=1:20  
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This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics. It has not been cleared or approved by the FDA. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

**COMMENTS**

Comments: This result does not exclude a diagnosis of Myasthenia Gravis.

Recommendations: Health care providers, please contact the Athena Diagnostics Client Services Department at 1-800-394-4493 if you wish to speak with a clinical consultant regarding this test result.

Other testing available: If there is high clinical suspicion for myasthenia gravis, consider testing for LRP4 antibodies.

Background information: Myasthenia gravis (MG) is an autoimmune disease affecting the neuromuscular junctions of skeletal muscles. The predominant clinical feature is fatigability and weakness of the muscles that typically become progressively worse during periods of sustained activity and improve after periods of rest (1,2). Age of onset of MG is variable with an overall incidence of approximately 15:100,000 (1).

Anti-MuSK antibodies have been associated with Myasthenia Gravis (3,4). Although the majority of patients with generalized myasthenia gravis (MG) have antibodies against AChR (AChR-MG), 10-15% are seronegative. Within this group, about 40% have anti-MuSK antibodies, representing 5-8% of the MG population (3,4). Diagnosis of MuSK MG can be challenging due to its atypical presentation, including few symptom fluctuations, non-responsiveness to acetylcholinesterase inhibitors in a significant proportion of patients and negative electrodiagnostic studies when performed on limb muscles (4).

**METHODS**

Detection of antibodies was performed by Radioimmunoassay (RIA) methodology.

Limitations of analysis: Reagent effectiveness may affect the signal intensity of the response. Although rare, false positive or false

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negative results may occur. All results should be interpreted in the context of clinical findings, relevant history, and other laboratory data.

Detection of antibodies was performed by Radioimmunoassay (RIA) methodology.

Limitations of analysis: Reagent effectiveness may affect the signal intensity of the response. Although rare, false positive or false negative results may occur. All results should be interpreted in the context of clinical findings, relevant history, and other laboratory data.

**REFERENCES**

1. Scherer, K, et al. (2005) JAMA 293: 1906-14. (PMID: 15840866)
2. Bedlack, RS, et al. (2000) Postgrad Med 107: 211-4, 220-2. (PMID: 10778421)
3. Berrih-Aknin, S, et al. (2014) J Autoimmun 52: 90-100. (PMID: 24389034)
4. Evoli, A, et al. (2013) Autoimmun Rev 12: 931-5. (PMID: 23535158)

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Testing performed at:  
Athena Diagnostics 200 Forest Street Marlborough, MA 01752

1. Scherer, K, et al. (2005) JAMA 293; 1906-14. (PMID: 15840866)
2. Bedlack, RS, et al. (2000) Postgrad Med 107: 211-4, 220-2. (PMID: 10778421)
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**PERFORMING SITE:**

**SPECIMEN:**