

Muscle specific kinase antibodies by radioimmunoprecipitation

Test Name	Muscle specific kinase antibodies by RIPA
Abbreviations	MuSK Ab; MuSK RIPA
CPT code	83519
Methodology	In-house radioimmunoprecipitation assay
Intended use	Diagnosis of myasthenia gravis (MG)
Test requirements	<p><u>Specimen Type:</u> Serum</p> <p><u>Minimum volume:</u> 0.5 mL</p> <p><u>Preferred volume:</u> 3 mL</p> <p><u>Rejection criteria:</u> grossly hemolytic, icteric, or lipemic. If the sample arrives at room temperature.</p>
Specimen collection	<ul style="list-style-type: none"> No patient preparation required before collection. 5 mL SST tube (gold-top) Spin tubes, aliquot serum, and ship on cold-packs same day
Specimen stability	Up to 7 days refrigerated (2 – 8°C) -20°C for longer term storage – avoid subsequent freeze thaws
Test schedule	Once a week (2 day testing procedure)
TAT	2 – 8 days
Reference range	N/A
Limitations	<ul style="list-style-type: none"> This test was developed and its performance determined by Neurocode USA Inc. It has not been cleared or approved by the Food and Drug Administration. Please indicate if patients are on immunomodulating treatments as these may interfere with testing. False negative results can occur when antibodies are found in excess, known as the prozone effect. Causal antibodies cannot be identified in about 10% of MG cases. Therefore, a positive result is specific for the diagnosis of MuSK ab myasthenia gravis (MG), but a negative result does not rule out an MG diagnosis.
References	<ul style="list-style-type: none"> Oger J, Frykman H. An update on laboratory diagnosis in myasthenia gravis. Clinica Chimica Acta. 2015 Sep 20;449:43-8. Frykman H, Kumar P, Oger J. Immunopathology of autoimmune myasthenia gravis: implications for improved testing algorithms and treatment strategies. Front Neurol. 2020 Dec 9;11:596621. Rodríguez Cruz PM, et al. Clinical Features and Diagnostic Usefulness of Antibodies to Clustered Acetylcholine Receptors in the Diagnosis of Seronegative Myasthenia Gravis. JAMA Neurol. 2015; 72: 642–649. Han J, et al. A novel MuSK cell-based myasthenia gravis diagnostic assay. J Neuroimmunol. 2019 Dec 15;337:577076.