

## Acetylcholine receptor antibodies by live cell-based assay

Test Name	Acetylcholine receptor antibodies by live CBA
Abbreviations	AChR Ab; AChR CBA
CPT code	84999
Methodology	Laboratory developed live cell-based 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, lipemic, or icteric. If the sample arrives at room temperature.</p>
Specimen collection	<ul style="list-style-type: none"> <li>No patient preparation required before collection.</li> <li>5 mL SST tube (gold-top)</li> <li>Spin tubes, aliquot serum, and ship on cold-packs same day</li> </ul>
Specimen stability	<p>Up to 24 hrs at room temp (15 - 25°C)</p> <p>Up to 7 days refrigerated (2 - 8°C)</p> <p>Up to 2 freeze / thaw</p>
Test schedule	Once a week (5-day testing procedure)
TAT	1 - 3 weeks
Reference range	N/A
Limitations	<ul style="list-style-type: none"> <li>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.</li> <li>Please indicate if patients are on immunomodulating treatments as these may interfere with testing.</li> <li>Causal antibodies cannot be identified in about 10% of MG cases. Therefore, a positive result is specific for the diagnosis of AChR ab myasthenia gravis (MG), but a negative result does not rule out an MG diagnosis.</li> </ul>
References	<ul style="list-style-type: none"> <li>Vincent A, Davis JN. Anti-acetylcholine receptor antibodies. JNNP. 1980 Jul 1;43(7):590-600.</li> <li>Leite MI, et al. IgG1 antibodies to acetylcholine receptors in 'seronegative' myasthenia gravis. Brain. 2008 Jul 1;131(7):1940-52.</li> <li>Frykman H, et al. Immunopathology of autoimmune myasthenia gravis: implications for improved testing algorithms and treatment strategies. Front Neurol. 2020 Dec 9;11:596621.</li> <li>Frykman H, Kumar P. Laboratory Testing of Myasthenia Gravis: New Treatments Drive Change. JALM. 2021 Jul 1;6(4):1087-9.</li> </ul>