

## Aquaporin-4 Antibodies by Live Cell-Based Assay (AQP4 CBA)

Test Name	Aquaporin-4 antibodies by live CBA
Abbreviations	AQP4 Ab; NMO Ab
CPT code	86052
Methodology	In-house live cell-based assay
Intended Use	Establish a neuromyelitis optica (NMO) diagnosis and distinguish NMOSD from multiple sclerosis.
Test requirements	<u>Specimen Type</u> : Serum <u>Minimum volume</u> : 0.5 mL <u>Preferred volume</u> : 3 mL <u>Rejection criteria</u> : grossly hemolytic, icteric, or lipemic. If the sample arrives at room temperature.
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	Up to 7 days refrigerated (2 – 8°C) -20°C for longer term storage – avoid subsequent freeze thaws
Test schedule	On demand
TAT	1 week
Reference range	N/A
Limitations	<ul style="list-style-type: none"> <li>This test was developed and its performance characteristics determined by BCNI. The test was performed in a DAP, CAP and CLIA certified laboratory and is intended for clinical purposes</li> <li>Please indicate if patients are on immunomodulating treatments as these may interfere with testing.</li> <li>Aquaporin-4 antibodies are found in 75% of neuromyelitis optica (NMO). Diagnosis of NMO requires extensive acute myelitis and optic neuritis. While a positive result for AQP4 Ab is diagnostic, a negative result does not rule out an NMO diagnosis.</li> </ul>
References	<ul style="list-style-type: none"> <li>Touma L, Muccilli A. Diagnosis and management of central nervous system demyelinating disorders. <i>Neurol Clinics</i>. 2022 Feb 1;40(1):113-31.</li> <li>Wingerchuk DM, et al. International consensus diagnostic criteria for neuromyelitis optica spectrum disorders. <i>Neurol</i>. 2015 Jul 14;85(2):177-89.</li> <li>Frykman H, et al. <i>AMLI Austin</i>. 2021</li> </ul>

\*Testing performed at BC Neuroimmunology