

Peripheral Nervous System Demyelinating
Neuropathy, Autoimmune Evaluation, Serum

Patient ID C7028846-0006093	Patient Name DMNES, ABNORMAL	Birth Date 1990-10-30	Sex M	Age 33
Order Number X100469610	Client Order Number X100469610	Ordering Physician UNKNOWN, PROVIDER	Report Notes	
Account Information C7028846 DLMP Rochester		Collected 22 Jul 2024 09:00		

Demyelinating Neuropathy Ab Eval, S

Demyelinating Neuropathy Interpretation, S

MCR

These results are suggestive of an immune mediated demyelinating neuropathy but given the presence of multiple antibody specificities careful consideration of the clinical presentation and correlation with correlation with clinical electrodiagnostic features is emphasized. Neurofascin-155 IgG4 and Contactin-1 IgG are associated with autoimmune nodopathy and have been reported to be associated with limited IVIG response. Contactin-1 IgG is also associated with co-existing membranous glomerulonephropathy. GQ1b (IgG) antibodies occur in Miller-Fisher, Fisher-Bickerstaff, pharyngeal cervical-brachial variant Guillain-Barre syndromes having variably present demyelinating neuropathy, ophthalmoplegia, ataxia, brainstem features with encephalitis and less commonly other neurogenic conditions.

- References Dubey, D., et al. (2020). Contactin-1 autoimmunity: Serologic, neurologic, and pathologic correlates. Neurology Neuroimmunology Neuroinflammation, 7(4). [PMID: 32434797]
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- Odaka, M., Yuki, N., and Hirata, K. (2001). Anti-GQ1b IgG antibody syndrome: Clinical and immunological range. Journal of Neurology, Neurosurgery and Psychiatry, 70(1), 50–55. [PMID: 11118240]
- Querol, L., et al. (2014). Neurofascin IgG4 antibodies in CIDP associate with disabling tremor and poor response to IVIg. Neurology, 82(10), 879–886. [PMID: 24574342]
- Shahrizaila, N., and Yuki, N. (2013). Bickerstaff brainstem encephalitis and Fisher syndrome: Anti-GQ1B antibody syndrome. Journal of Neurology, Neurosurgery and Psychiatry. [PMID: 24052504]
- Shelly, S., et al. (2021). Neurofascin-155 immunoglobulin subtypes: Clinicopathologic associations and neurologic outcomes. Neurology, 97(24), e2392-e2403. [PMID: 34568827]

Performing Site Legend

Code	Laboratory	Address	Lab Director	CLIA Certificate
MCR	Mayo Clinic Laboratories - Rochester Main Campus	200 First Street SW, Rochester, MN 55905	Nikola Baumann Ph.D.	24D0404292

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Result Name	Result	Unit	Reference Value	Performing Site
 Contactin-1 IgG CBA, S	Positive		Negative	1 MCR
 GQ1b-IgG ELISA, S	Positive		Negative	1 MCR
 Neurofascin-155 IgG4, S	Positive		Negative	1 MCR
IgG Disialo. GD1b	Negative		Negative	1 MCR
IgM Disialo. GD1b	Negative		Negative	1 MCR
IgG Monos. GM1	Negative		Negative	1 MCR
IgM Monos. GM1	Negative		Negative	1 MCR
MAG IgM, S	<1500	Buhlmann Titer Unit	<1500	1 MCR

Received: 23 Jul 2024 09:16

Reported: 23 Jul 2024 09:34

Laboratory Notes

- 1** This test was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

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