**ARUP** Laboratories

500 Chipeta Way – Salt Lake City, UT 84108 (800)522-2787 - www.aruplab.com Julio C. Delgado, M.D. M.S., Director of Laboratories Patient Age/Gender: 9 years Male Printed: 20-Jun-19 12:38:38

Procedure	Result	Units	Ref Interval	Reported/ Accession Collected Received Verified
MAG Antibody, IgM Elisa	5	TU	[0-999]	19-158-900103 07-Jun-19 07-Jun-19 07-Jun-19
• • •	0.50		[0.00.0.01	10:08:00 10:08:00 11:52:08 19-158-900103 07-Jun-19 07-Jun-19 07-Jun-19
SGPG Antibody, IgM	0.50	IV	[0.00-0.99]	10:08:00 10:08:00 11:52:08
Asialo-GM1 Antibodies, IgG/IgM	5	IV	[0-50]	19-158-900103 07-Jun-19 07-Jun-19 07-Jun-19 10:08:00 10:08:00 11:52:08
GM1 Antibodies, IgG/IgM	5	IV	[0-50]	19-158-900103 07-Jun-19 07-Jun-19 07-Jun-19
OD1 - Autilia dia a Tag/Taw	F	T17	[0 [0]	10:08:00 10:08:00 11:52:08 19-158-900103 07-Jun-19 07-Jun-19 07-Jun-19
GD1a Antibodies, IgG/IgM	5	IV	[0-50]	10:08:00 10:08:00 11:52:08
GD1b Antibodies, IgG/IgM	4	IV	[0-50]	19-158-900103 07-Jun-19 07-Jun-19 07-Jun-19
0011 7 111 11 7 0/7 11	F		[0 [0]	10:08:00 10:08:00 11:52:08 19-158-900103 07-Jun-19 07-Jun-19 07-Jun-19
GQlb Antibodies, IgG/IgM	5	IV	[0-50]	10:08:00 10:08:00 11:52:08
Immunoglobulin G	600	mg/dL	[584-1,509]	19-158-900103 07-Jun-19 07-Jun-19 07-Jun-19
				10:08:00 10:08:00 11:52:08 19-158-900103 07-Jun-19 07-Jun-19 07-Jun-19
Immunoglobulin A	55	mg/dL	[45-234]	10:08:00 10:08:00 11:52:08
Immunoglobulin M	55	mg/dL	[49-230]	19-158-900103 07-Jun-19 07-Jun-19 07-Jun-19
-		_		10:08:00 10:08:00 11:52:08
Total Protein, Serum	8.2 H	g/dL	[6.2-8.1]	19-158-900103 07-Jun-19 07-Jun-19 07-Jun-19 10:08:00 10:08:00 11:52:08
Albumin	4.00	q/dL	[3.75-5.01]	19-158-900103 07-Jun-19 07-Jun-19 07-Jun-19
		5.		10:08:00 10:08:00 11:52:08
Alpha 1 Globulin	0.25	g/dL	[0.19-0.46]	19-158-900103 07-Jun-19 07-Jun-19 07-Jun-19 10:08:00 10:08:00 11:52:08
Alpha 2 Globulin	0.50	q/dL	[0.48-1.05]	19-158-900103 07-Jun-19 07-Jun-19 07-Jun-19
Alpha 2 Globallii		9/41	[0.10 1.05]	10:08:00 10:08:00 11:52:08
Beta Globulin	0.50	g/dL	[0.48-1.10]	19-158-900103 07-Jun-19 07-Jun-19 07-Jun-19
Gamma	0.63	q/dL	[0.62-1.51]	10:08:00 10:08:00 11:52:08 19-158-900103 07-Jun-19 07-Jun-19 07-Jun-19
Gaillila	0.03	9/41	[0.02-1.51]	10:08:00 10:08:00 11:52:08
Immunofixation	IFE Done			19-158-900103 07-Jun-19 07-Jun-19 07-Jun-19
ODED / TER. To be a superback in a	G M - + -			10:08:00 10:08:00 11:52:08 19-158-900103 07-Jun-19 07-Jun-19 07-Jun-19
SPEP/IFE Interpretation	See Note			10:08:00 10:08:00 11:52:08
EER Motor Neuropathy Panel	See Note f			19-158-900103 07-Jun-19 07-Jun-19 07-Jun-19
				10:08:00 10:08:00 11:52:08

07-Jun-19 10:08:00 EER Motor Neuropathy Panel: Access ARUP Enhanced Report using either link below:

-Enter Username, Password: https://c11-erpt.aruplab.com Username: Password:

07-Jun-19 10:08:00 MAG Antibody, IgM Elisa: INTERPRETIVE INFORMATION: MAG Antibody, IgM ELISA

An elevated IgM antibody concentration greater than 999 TU against myelin-associated glycoprotein (MAG) suggests active demyelination in peripheral neuropathy. A normal concentration (less than 999 TU) generally rules out an anti-MAG antibody-associated peripheral neuropathy.

TU=Titer Units

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement D: aruplab.com/CS

07-Jun-19 10:08:00 SGPG Antibody, IgM: INTERPRETIVE INFORMATION: SGPG Antibody, IgM

The majority of sulfate-3-glucuronyl paragloboside (SGPG) IgM-positive sera will show reactivity against MAG. Patients who are SGPG IgM

\* Abnormal, # = Corrected, C = Critical, f = Footnote, H = High, L = Low, t = Interpretive Text, @ = Reference Lab

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<sup>-</sup>Direct access:

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Patient Age/Gender: 9 years Male Printed: 20-Jun-19 12:38:38

positive and MAG IgM negative may have multi-focal motor neuropathy with conduction block.

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement D: aruplab.com/CS

07-Jun-19 10:08:00 GQlb Antibodies, IgG/IgM: INTERPRETIVE INFORMATION: Ganglioside (Asialo-GM1, GM1, GM2, GD1a, GD1b, and GQ1b) Antibodies, IgG/IgM

29 IV or less: Negative 30-50 IV: Equivocal 51-100 IV: Positive

101 IV or greater: Strong Positive

Ganglioside antibodes are associated with diverse peripheral neuropathies. Elevated antibody levels to ganglioside-monosialic acid (GM1), and the neutral glycolipid, asialo GM1 are associated with motor or sensorimotor neuropathies, particularly multifocal motor neuropathy. Anti-GM1 may occur as IgM (polyclonal or monoclonal) or IgG antibodies. These antibodies may also be found in patients with diverse connective tissue diseases as well as normal individuals. GD1a antibodies are associated with different variants of Guillain-Barre syndrome (GBS) particularly acute motor axonal neuropathy while GD1b antibodies are predominantly found in sensory ataxic neuropathy syndrome. Anti-GQ1b antibodies are seen in more than 80 percent of patients with Miller-Fisher syndrome and may be elevated in GBS patients with ophthalmoplegia. The role of isolated anti-GM2 antibodies is unknown. These tests by themselves are not diagnostic and should be used in conjunction with other clinical parameters to confirm disease.

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement D: aruplab.com/CS

07-Jun-19 10:08:00 Immunoglobulin G: REFERENCE INTERVAL: Immunoglobulin G

Access complete set of age- and/or gender-specific reference intervals for this test in the ARUP Laboratory Test Directory (aruplab.com).

07-Jun-19 10:08:00 Immunoglobulin A: REFERENCE INTERVAL: Immunoglobulin A

Access complete set of age- and/or gender-specific reference intervals for this test in the ARUP Laboratory Test Directory (aruplab.com).

07-Jun-19 10:08:00 Immunoglobulin M: REFERENCE INTERVAL: Immunoglobulin M

Access complete set of age- and/or gender-specific reference intervals for this test in the ARUP Laboratory Test Directory (aruplab.com).

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