

Specimen Collected: 10-Jun-22 11:23

Motor Neuropathy Panel		Received: 10-Jun-22 11:48	Report/Verified: 16-Jun-22 13:29
Procedure	Result	Units	Reference Interval
MAG Antibody, IgM Elisa	2500 ^{H i1}	TU	0-999
SGPG Antibody, IgM	35.00 ^{H i2}	IV	0.00-0.99
Asialo-GM1 Antibodies, IgG/IgM	100 ^H	IV	0-50
GM1 Antibodies, IgG/IgM	100 ^H	IV	0-50
GD1a Antibodies, IgG/IgM	100 ^H	IV	0-50
GD1b Antibodies, IgG/IgM	100 ^H	IV	0-50
GQ1b Antibodies, IgG/IgM	100 ^{H i3}	IV	0-50
Immunoglobulin G	2250 ^{H i4}	mg/dL	768-1632
Immunoglobulin A	50 ^{L i5}	mg/dL	68-408
Immunoglobulin M	25 ^{L i6}	mg/dL	35-263
Total Protein, Serum	8.6 ^H	g/dL	6.3-8.2
Albumin	4.70	g/dL	3.75-5.01
Alpha 1 Globulin	0.29	g/dL	0.19-0.46
Alpha 2 Globulin	0.66	g/dL	0.48-1.05
Beta Globulin	0.56	g/dL	0.48-1.10
Gamma	2.39 ^H	g/dL	0.62-1.51
Monoclonal Protein	2.22	g/dL	
Immunofixation	IFE Done		
SPEP/IFE	See Note ^{f1}		
Interpretation			
EER Motor Neuropathy Panel	See Note ^{f2}		

Result Footnote

- f1: SPEP/IFE Interpretation
M-spike in the gamma region. The monoclonal protein peak accounts for 2.22 g/dL of the total 2.39 g/dL of protein in the gamma region. IFE gel pattern shows an IgG type kappa monoclonal protein.
- f2: EER Motor Neuropathy Panel
Authorized individuals can access the ARUP Enhanced Report using the following link:
[\[REDACTED\]](#)

Test Information

- i1: 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.

*=Abnormal, #=Corrected, C=Critical, f=Result Footnote, H=High, i=Test Information, L=Low, t=Interpretive Text, @=Performing lab

Unless otherwise indicated, testing performed at:

ARUP Laboratories

500 Chipeta Way, Salt Lake City, UT 84108

Laboratory Director: Tracy I. George, MD

ARUP Accession: 22-161-900077

Report Request ID: 16280583

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Test Information

i1: MAG Antibody, IgM Elisa

TU=Titer Units

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i2: 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 positive and MAG IgM negative may have multi-focal motor neuropathy with conduction block.

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i3: GQ1b 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 antibodies 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.

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Test Information

i3: GQ1b Antibodies, IgG/IgM
Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i4: 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).

i5: 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).

i6: 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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