MAYO CLINIC LABORATORIES

Test Definition: FMNPP

Motor Neuropathy Panel

Overview

Method Name

Semi-Quantitative Enzyme-Linked Immunosorbent Assay; Quantitative Immunoturbidimetry; Quantitative Capillary Electrophoresis; Qualitative Immunofixation Electrophoresis; Colorimetric Assay

NY State Available

Yes

Specimen

Specimen Type

Serum SST

Specimen Required

Collection Container/Tube: Serum gel

Submission Container/Tube: Plastic vial

Specimen Volume: 4 mL Serum

Collection Instructions:

1. As soon as possible or within 2 hours of specimen collection, centrifuge and aliquot 4 mL serum into a plastic vial.
2. Send refrigerate.

Specimen Minimum Volume

Serum: 2 mL

Reject Due To

Hemolysis	Reject
Lipemia	Reject
Gross icterus	Reject
Contaminated specimens	Reject
Heat-inactivated specimens	Reject

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Serum SST	Refrigerated (preferred)	7 days	
	Frozen	30 days	

Clinical & Interpretive

Clinical Information

Refer to https://ltd.aruplab.com/

Reference Values

Myelin Associated Glycoprotein (MAG) Antibody, IgM:
0-999 TU
TU=Titer Units

Sulfate-3-Glucuronyl Paragloboside (SGPG) Antibody, IgM:
0.00-0.99 IV

Asialo-GM1 Antibodies, IgG/IgM: 0-50 IV
29 IV or less: Negative
30-50 IV: Equivocal
51-100 IV: Positive
101 IV or greater: Strong Positive

GM1 Antibodies, IgG/IgM: 0-50 IV
29 IV or less: Negative
30-50 IV: Equivocal
51-100 IV: Positive
101 IV or greater: Strong Positive

GD1a Antibodies, IgG/IgM: 0-50 IV
29 IV or less: Negative
30-50 IV: Equivocal
51-100 IV: Positive
101 IV or greater: Strong Positive

GD1b Antibodies, IgG/IgM: 0-50 IV
29 IV or less: Negative
30-50 IV: Equivocal
51-100 IV: Positive
101 IV or greater: Strong Positive

GQ1b Antibodies, IgG/IgM: 0-50 IV
29 IV or less: Negative
30-50 IV: Equivocal
51-100 IV: Positive
101 IV or greater: Strong Positive

Immunoglobulin G:

0-2 years: 242-1108 mg/dL
3-4 years: 485-1160 mg/dL
5-9 years: 514-1672 mg/dL
10-14 years: 581-1652 mg/dL
15-18 years: 479-1433 mg/dL
> or =19 years: 768-1632 mg/dL

Immunoglobulin A:
0-2 years: 2-126 mg/dL
3-4 years: 14-212 mg/dL
5-9 years: 52-226 mg/dL
10-14 years: 42-345 mg/dL
15-18 years: 60-349 mg/dL
> or =19 years: 68-408 mg/dL

Immunoglobulin M:
0-2 years: 21-215 mg/dL
3-4 years: 26-155 mg/dL
5-9 years: 26-188 mg/dL
10-14 years: 47-252 mg/dL
15-18 years: 26-232 mg/dL
> or 19 years: 35-263 mg/dL

Total Protein, Serum:
Refer to report. Reference intervals may vary based on instrumentation.

Albumin:
3.75-5.01 g/dL

Alpha 1 Globulin:
0.19-0.46 g/dL

Alpha 2 Globulin:
0.48-1.05 g/dL

Beta Globulin:
0.48-1.10 g/dL

Gamma:
0.62-1.51 g/dL

Monoclonal Protein:
< or =0.00 g/dL

Interpretation

Myelin Associated Glycoprotein Antibody, IgM:
An elevated IgM antibody concentration greater than 999 titer units (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.

Sulfate-3-Glucuronyl Paragloboside 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.

Ganglioside (Asialo-GM1, GM1, GM2, GD1a, GD1b, and GQ1b) Antibodies, IgG/IgM:
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.

Performance

PDF Report
No

Day(s) Performed
Monday through Sunday

Report Available
3 to 12 days

Performing Laboratory Location
ARUP Laboratories

Fees & Codes

Fees
- Authorized users can sign in to Test Prices for detailed fee information.
- Clients without access to Test Prices can contact Customer Service 24 hours a day, seven days a week.
- Prospective clients should contact their account representative. For assistance, contact Customer Service.

Test Classification

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

CPT Code Information

82784 x 3
83516 x 7
84155
84165
86334

LOINC® Information

Test ID	Test Order Name	Order LOINC® Value
FMNPP	Motor Neuropathy Panel	Not Provided

Result ID	Test Result Name	Result LOINC® Value
Z4539	MAG Antibody, IgM	17314-6
Z4540	SGPG Antibody, IgM	31666-1
Z4541	Asialo-GM1 Antibodies, IgG-IgM	44737-5
Z4542	GM1 Antibodies, IgG-IgM	63244-8
Z4543	GD1a Antibodies, IgG-IgM	48656-3
Z4544	GD1b Antibodies, IgG-IgM	26870-6
Z4545	GQ1b Antibodies, IgG-IgM	31674-5
Z4546	Immunoglobulin G	2465-3
Z4547	Immunoglobulin A	2458-8
Z4548	Immunoglobulin M	2472-9
Z4549	Total Protein, Serum	2885-2
Z4550	Albumin	1751-7
Z4551	Alpha 1 Globulin	2865-4
Z4552	Alpha 2 Globulin	2868-8
Z4553	Beta Globulin	2871-2
Z4554	Gamma	2874-6
Z4555	Immunofixation	25700-6
Z4556	SPEP-IFE Interpretation	49275-1
Z4557	EER Motor Neuropathy Panel	11526-1
Z6250	Monoclonal Protein	Not Provided