MAYO CLINIC
LABORATORIES GD1b, and GQ1b) Antibodies

## Overview

## Method Name

Semi-Quantitative Enzyme-Linked Immunosorbent Assay

## NY State Available

Yes

## Specimen

## Specimen Type

Serum SST

## Specimen Required

Draw blood in a serum gel tube(s). Spin down and send 1 mL of serum refrigerated in a plastic vial.

## Specimen Minimum Volume

0.3 mL

## Reject Due To

| Hemolysis | Mild OK; Grossly Reject |
| :--- | :--- |
| Lipemia | Mild OK; Grossly Reject |
| Icterus | Mild OK; Grossly Reject |
| Other | Plasma, CSF, or other body fluids. Contaminated, heat-inactivated specimens |

## Specimen Stability Information

| Specimen Type | Temperature | Time | Special Container |
| :--- | :--- | :--- | :--- |
| Serum SST | Refrigerated (preferred) | 14 days |  |
|  | Frozen | 365 days |  |

## Clinical \& Interpretive

## Reference Values

| 29 IV or less | Negative |
| :--- | :--- |
| $30-50$ IV | Equivocal |

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| 51-100 IV | Positive |
| :--- | :--- |
| 101 IV or greater | Strong Positive |

## Interpretation

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 $\lg \mathrm{M}$ (polyclonal or monoclonal) or $\lg G$ 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, Wednesday, Friday

## Report Available

1 to 8 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. The U.S. Food and Drug Administration has not approved or cleared this test; however, FDA clearance or approval is not currently required for clinical use. The results are not intended to be used as the sole means for clinical diagnosis or patient management decisions.

## CPT Code Information

$83516 \times 6$

## LOINC® Information

| Test ID | Test Order Name | Order LOINC ${ }^{\oplus}$ Value ${ }^{\text {a }}$ |
| :--- | :--- | :--- |
| FGAGM | Ganglioside Antibodies, IgG-IgM | $82455-7$ |


| Result ID | Test Result Name | Result LOINC $^{\circledR}$ Value |
| :--- | :--- | :--- |
| Z4245 | Asialo-GM1 Antibodies, IgG-IgM | $88723-2$ |
| Z4246 | GM1 Antibodies, IgG-IgM | $31500-2$ |
| Z4247 | GM2 Antibodies, IgG-IgM | $88731-5$ |
| Z4248 | GD1a Antibodies, IgG-IgM | $88724-0$ |
| Z4249 | GD1b Antibodies, IgG-IgM | $88730-7$ |
| Z4250 | GQ1b Antibodies, IgG-IgM | $88729-9$ |

