



# Test Definition: FGAGM

Ganglioside (Asialo-GM1, GM1, GM2, GD1a, GD1b, and GQ1b) Antibodies

## Overview

### Method Name

Semi-Quantitative Enzyme-Linked Immunosorbent Assay

### NY State Available

Yes

## Specimen

### Specimen Type

Serum SST

### Specimen Required

#### Collection Container/Tube:

**Preferred:** Serum gel

**Acceptable:** Red top

**Submission Container/Tube:** Plastic vial

**Specimen Volume:** 0.5 mL Serum

#### Collection Instructions:

1. Within 2 hours of collection, centrifuge and aliquot 1 mL of serum into a plastic vial.
2. Send refrigerated.

### Specimen Minimum Volume

Serum: 0.1 mL

### Reject Due To

|                                   |        |
|-----------------------------------|--------|
| Gross hemolysis                   | Reject |
| Gross lipemia                     | Reject |
| Gross icterus                     | Reject |
| Contaminated specimens            | Reject |
| Spinal fluid or other body fluids | Reject |
| Heat-inactivated specimens        | Reject |

**Specimen Stability Information**

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

**Clinical & Interpretive****Clinical Information**Refer to <https://ltd.aruplab.com/>**Reference Values**

Negative: &lt; or =29 IV

Equivocal: 30-50 IV

Positive: 51-100

Strong Positive: &gt; or =101 IV

**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 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, 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 x 6

**LOINC® Information**

| Test ID | Test Order Name                 | Order LOINC® Value |
|---------|---------------------------------|--------------------|
| FGAGM   | Ganglioside Antibodies, IgG-IgM | 82455-7            |

| Result ID | Test Result Name               | Result LOINC® 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             |