

Patient Samplereport, FSUAB N	Requesting Physician	Accession Number
Date of Birth 111/09/1970	Sex M	Family Number/Kindred Number
Specimen Type Serum	Report to Mayo Medical Laboratories	Patient Number F41000607
Test Category Diagnostic (Symptomatic)	Address P.O. Box 4100	Specimen Collection Date 01/09/2017
Test Requested Sulfatide Autoantibody Test	Rochester, MN 55903-4100	Date Received 01/10/2017
	Additional Reports to:	Report Date 01/10/2017

Sulfatide Autoantibody Test

NEGATIVE

This test did not detect abnormal levels of anti-Sulfatide antibodies.

INTERPRETIVE RESULTS TABLE

	Test	Technical Result	Reference Range
Negative	anti-Sulfatide IgG	<1:2,000	Negative <1:2000, Borderline, Positive >=1:2000
	anti-Sulfatide IgM	<1:2,000	Negative <1:2000, Borderline, Positive >=1:2000

Comments: This result does not exclude a diagnosis of an autoimmune etiology for the neurological symptoms associated with peripheral neuropathy.

Recommendations: Health care providers, please contact the Athena Diagnostics Client Services Department at 1-800-394-4493 if you wish to speak with a clinical consultant regarding this test result.

Other testing available: Athena Diagnostics recommends additional testing, if not already performed. Athena Diagnostics currently offers the following antibody tests for peripheral neuropathy: anti-GM1, anti-asialo GM1, anti-GD1a, anti-GD1b, anti-SGPG, anti-MAG, anti-GALOP, and anti-Hu. Please contact the Athena Diagnostics Client Services Department or visit AthenaDiagnostics.com for information regarding additional testing that may be appropriate based on this individual's clinical presentation.

Background information: Peripheral neuropathies (PNs) are a group of neurological disorders affecting one or more of the peripheral nerves (1, 2). Causes of PN include nerve compression, genetic mutations, inflammation, metabolic abnormalities, vitamin deficiencies, exposure to toxins or drugs, or the presence of autoimmune antibodies (1). Symptoms of PN vary based on location and mechanism of nerve damage but can include sensory impairment, distal weakness, loss of sensation, muscle weakness, and pain (1, 2). PNs are typically classified based on the types of nerves affected, predominantly motor, predominantly sensory, or a combination of both (2).

IgG and more commonly IgM Antibodies to sulfatide have been associated with sensory and sensory-motor neuropathies sometimes accompanied by pain (3, 4, 5). Additionally, IgG anti-sulfatide antibodies have been associated with distal sensory polyneuropathy (DSP) in individuals with HIV (6).

Methods:

Detection of antibodies was performed by Enzyme Linked Immunosorbent Assay (ELISA) methodology.

Samples in the borderline range have an elevated level of anti-sulfatide antibodies on the screen assay, but the level of antibodies is below the positive cut off value.

Limitations of analysis: Although rare, false positive or false negative results may occur. All results should be interpreted in the context of clinical findings, relevant history, and other laboratory data.

Background References

1. Andreoli et al. (2007) *Cecil Essentials of Medicine*. 7th ed. Saunders Elsevier. (ISBN-13: 978-1-4160-2933-5)
2. Latov, N. (2007) *Peripheral Neuropathy: When the Numbness, Weakness and Pain Won't Stop*. AAN press. (ISBN-13: 978-1-932603-59- 0)

Sulfatide Autoantibody Test



Sulfatide Autoantibody Test

3. Pestronk, A, et al. (1991) Neurology 41: 357-62. (PMID: 1706491)
4. Lopate, G, et al. (1997) J Neurol Neurosurg Psychiatry 62: 581-5. (PMID: 9219742)
5. van den Berg, LH, et al. (1993) J Neurol Neurosurg Psychiatry 56: 1164-8. (PMID: 8229027)
6. Lopate, G, et al. (2005) Neurology 64: 1632-4. (PMID: 15883332)

This test was developed and its performance characteristics have been determined by Athena Diagnostics. Performance characteristics refer to the analytical performance of the test.

Laboratory oversight provided by Joseph J. Higgins, M.D., F.A.A.N., CLIA license holder, Athena Diagnostics (CLIA # 22D0069726)