ARUP Laboratories
500 Chipeta Way – Salt Lake City, UT 84108
(800)522-2787 - www.aruplab.com
Julio C. Delgado, M.D. M.S., Director of Laboratories

*****Example Report*****

Patient Age/Gender: Unknown Unknown
Printed: 23-Sep-19 11:53:10

Procedure	Result	Units	Ref Interval	Accession	Collected	Received	Reported/ Verified
N-methyl-D-Aspartate Receptor Ab, Serum	<1:10 f		[<1:10]	19-266-900129	23-Sep-19 11:36:00	23-Sep-19 11:36:00	23-Sep-19 11:42:01
CASPR2 Ab IgG Screen by IFA, Serum	Detected		[<1:10]	19-266-900129	23-Sep-19 11:36:00	23-Sep-19 11:36:00	23-Sep-19 11:42:01
CASPR2 Ab IgG Titer by IFA, Serum	**1:10 ***		[<1:10]	19-266-900129	23-Sep-19 11:36:00	23-Sep-19 11:36:00	23-Sep-19 11:42:11
LGI1 Ab IgG Screen by IFA, Serum	Detected		[<1:10]	19-266-900129	23-Sep-19 11:36:00	23-Sep-19 11:36:00	23-Sep-19 11:42:01
LGI1 Ab IgG Titer by IFA, Serum	**1:40 ***		[<1:10]	19-266-900129	23-Sep-19 11:36:00	23-Sep-19 11:36:00	23-Sep-19 11:42:15
Neuromyelitis Optica/AQP4-IgG, Serum	**Detected ***		[<1:10]	19-266-900129	23-Sep-19 11:36:00	23-Sep-19 11:36:00	23-Sep-19 11:42:42
Neuromyelitis Optica/AQP4-IgG Titer Ser	**1:40 ***		[<1:10]	19-266-900129	23-Sep-19 11:36:00	23-Sep-19 11:36:00	23-Sep-19 11:42:47
AMPA Receptor Ab IgG Screen, Serum	**Detected ***		[<1:10]	19-266-900129	23-Sep-19 11:36:00	23-Sep-19 11:36:00	23-Sep-19 11:42:01
AMPA Receptor Ab IgG Titer, Serum	**1:10 ***		[<1:10]	19-266-900129	23-Sep-19 11:36:00	23-Sep-19 11:36:00	23-Sep-19 11:42:10
GABA-B Receptor Ab IgG Screen, Serum	**Detected ***		[<1:10]	19-266-900129	23-Sep-19 11:36:00	23-Sep-19 11:36:00	23-Sep-19 11:42:01
GABA-B Receptor Ab IgG Titer, Serum	**1:10 ***		[<1:10]	19-266-900129	23-Sep-19 11:36:00	23-Sep-19 11:36:00	23-Sep-19 11:42:13
MOG Antibody IgG Screen, Serum	**Detected ***		[<1:10]	19-266-900129	23-Sep-19 11:36:00	23-Sep-19 11:36:00	23-Sep-19 11:42:01
MOG Antibody IgG Titer, Serum	**1:20 ***		[<1:10]	19-266-900129	23-Sep-19 11:36:00	23-Sep-19 11:36:00	23-Sep-19 11:42:17
Aquaporin-4 Receptor Antibody	**9.0 Hf**	U/mL	[<=2.9]	19-266-900129	23-Sep-19 11:36:00	23-Sep-19 11:36:00	23-Sep-19 11:42:01
Voltage-Gated Potassium Channel Ab, Ser	**415 H**	pmol/L	[0-31]	19-266-900129	23-Sep-19 11:36:00	23-Sep-19 11:36:00	23-Sep-19 11:42:01
Glutamic Acid Decarboxylase Antibody	5.0	IU/mL	[0.0-5.0]	19-266-900129	23-Sep-19 11:36:00	23-Sep-19 11:36:00	23-Sep-19 11:42:01

23-Sep-19 11:36:00 CASPR2 Ab IgG Screen by IFA, Serum
CASPR2 Antibody, IgG is detected. Titer results to follow.

23-Sep-19 11:36:00 LGI1 Ab IgG Screen by IFA, Serum
LGI1 Antibody, IgG is detected. Titer results to follow.

23-Sep-19 11:36:00 Neuromyelitis Optica/AQP4-IgG, Serum

Aquaporin-4 Receptor Antibody, IgG is detected. Titer results to follow.

23-Sep-19 11:36:00 AMPA Receptor Ab IgG Screen, Serum
AMPAR Antibody, IgG is detected. Titer results to follow.

23-Sep-19 11:36:00 GABA-B Receptor Ab IgG Screen, Serum
GABA-BR Antibody, IgG is detected. Titer results to follow.

23-Sep-19 11:36:00 MOG Antibody IgG Screen, Serum
MOG Antibody, IgG is detected. Titer results to follow.

23-Sep-19 11:36:00 N-methyl-D-Aspartate Receptor Ab, Serum:

Antibodies to NMDA were not detected, no additional testing to follow.

23-Sep-19 11:36:00 Aquaporin-4 Receptor Antibody:

AQP4 antibodies detected by ELISA. IFA testing to follow.

23-Sep-19 11:36:00 N-methyl-D-Aspartate Receptor Ab, Serum:
INTERPRETIVE INFORMATION: N-methyl-D-Aspartate Receptor Ab, Serum
Anti-NMDA receptor IgG antibody is found in a subset of patients with autoimmune limbic encephalitis and may occur with or without associated tumor. Decreasing antibody levels may be associated with therapeutic response; therefore, clinical correlation must be strongly considered. A negative test result does not rule out a diagnosis of autoimmune limbic encephalitis.

Test developed and characteristics determined by ARUP Laboratories. See Compliance

Statement B: aruplab.com/CS

23-Sep-19 11:36:00 CASPR2 Ab IgG Screen by IFA, Serum:
INTERPRETIVE INFORMATION: CASPR2 Ab IgG w/Reflex to Titer,
Serum
Contactin-associated protein-2 (CASPR2) IgG antibody may occur as part of the voltage-gated potassium channel (VGKC) complex antibodies.

The presence of CASPR2 IgG antibody is associated with a wide spectrum of clinical manifestations, including acquired neuromyotonia, limbic encephalitis, painful neuropathy and Morvan syndrome. Tumors such as thymoma, small-cell lung cancer, and other rarer tumors may occur. The full-spectrum of clinical disorders and tumors associated with the CASPR2 IgG antibody continues to be defined. Results should be interpreted in correlation with the patient's clinical history and other laboratory findings.

This indirect fluorescent antibody assay utilizes contactin-associated protein-2 (CASPR2) transfected cell lines for the detection and semi-quantification of the CASPR2 IgG antibody.

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement D: aruplab.com/CS

23-Sep-19 11:36:00 CASPR2 Ab IgG Titer by IFA, Serum:
INTERPRETIVE INFORMATION: CASPR2 Ab Titer IgG by IFA,
Serum
Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement D: aruplab.com/CS

23-Sep-19 11:36:00 LGI1 Ab IgG Screen by IFA, Serum:
INTERPRETIVE INFORMATION: LGI1 Ab IgG w/Reflex to Titer,
Serum
Leucine-rich, glioma-inactivated 1 protein (LGI1) IgG antibody may occur as part of the voltage-gated potassium channel (VGKC) complex antibodies.

The presence of LGI1 IgG antibody is mainly associated with limbic encephalitis, hyponatremia and myoclonic movements. LGI1 IgG antibody is rarely associated with tumors but may occur infrequently in Morvan syndrome, neuromyotonia and idiopathic epilepsy. The full-spectrum of clinical disorders associated with the LGI1 IgG antibody continues to be defined. Results should be interpreted in correlation with the patient's clinical history and other laboratory findings.

This indirect fluorescent antibody assay utilizes leucine-rich, glioma-inactivated 1 protein (LGI1) transfected cell lines for the detection and semi-quantification of the LGI1 IgG antibody.

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement D: aruplab.com/CS

23-Sep-19 11:36:00 LGI1 Ab IgG Titer by IFA, Serum:
INTERPRETIVE INFORMATION: LGI1 Ab Titer IgG by IFA,

Serum
Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement D: aruplab.com/CS

23-Sep-19 11:36:00 Neuromyelitis Optica/AQP4-IgG, Serum:
INTERPRETIVE INFORMATION: Neuromyelitis Optica/AQP4-IgG w/Rfx, Ser
Diagnosis of neuromyelitis optica (NMO) requires the presence of longitudinally extensive acute myelitis (lesions extending over 3 or more vertebral segments) and optic neuritis. Approximately 75 percent of patients with NMO express antibodies to the aquaporin-4 (AQP4) receptor. While the absence of AQP4 receptor antibodies does not rule out a diagnosis of NMO, presence of this antibody is diagnostic for NMO.

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement D: aruplab.com/CS

23-Sep-19 11:36:00 Neuromyelitis Optica/AQP4-IgG Titer Ser:
INTERPRETIVE INFORMATION: Neuromyelitis Optica/AQP4-IgG Titer Ser
Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement D: aruplab.com/CS.

23-Sep-19 11:36:00 AMPA Receptor Ab IgG Screen, Serum:
INTERPRETIVE INFORMATION: AMPA Receptor Ab IgG Screen, Serum
Alpha-amino-3-hydroxy-5-methyl-4-isoxazoleproprionic acid receptor (AMPAR) antibody is found in a subset of patients with autoimmune limbic encephalitis and may occur with or without associated tumor. Decreasing antibody levels may be associated with therapeutic response; therefore, clinical correlation must be strongly considered. A negative test result does not rule out a diagnosis of autoimmune encephalitis.

This indirect fluorescent antibody assay utilizes AMPAR transfected cell lines for the detection and semi-quantification of AMPAR IgG antibody.

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement D: aruplab.com/CS

23-Sep-19 11:36:00 AMPA Receptor Ab IgG Titer, Serum:
INTERPRETIVE INFORMATION: AMPA Receptor Ab IgG Titer, Serum

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement D: aruplab.com/CS

23-Sep-19 11:36:00 GABA-B Receptor Ab IgG Screen, Serum:
INTERPRETIVE INFORMATION: GABA Receptor Ab IgG Screen, Serum
Gamma-amino butyric acid receptor, type B (GABA-BR) antibody is found in a subset of patients with autoimmune limbic encephalitis and may occur with or without associated tumor. Decreasing antibody levels may be associated with therapeutic response; therefore, clinical correlation must be strongly considered. A negative test result does not rule out a diagnosis of autoimmune encephalitis.

This indirect fluorescent antibody assay utilizes GABA-BR transfected cell lines for the detection and semi-quantification of GABA-BR IgG antibody.

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement D: aruplab.com/CS

23-Sep-19 11:36:00 GABA-B Receptor Ab IgG Titer, Serum:
INTERPRETIVE INFORMATION: GABA-B Receptor Ab IgG Titer, Serum
Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement D: aruplab.com/CS

23-Sep-19 11:36:00 MOG Antibody IgG Screen, Serum:
INTERPRETIVE INFORMATION: MOG Antibody IgG Screen, Serum

Myelin oligodendrocyte glycoprotein (MOG) antibody is found in a subset of patients with neuromyelitis optica spectrum disorders including optic neuritis and transverse myelitis, brainstem encephalitis and acute disseminated encephalomyelitis. Persistence of antibody positivity may be associated with a relapsing course. Decreasing antibody levels may be associated with therapeutic response; therefore, clinical correlation must be strongly considered. A negative test result does not rule out a diagnosis of CNS demyelinating disease or autoimmune encephalitis.

This indirect fluorescent antibody assay utilizes full-length MOG transfected cell lines for the detection and semi-quantification of MOG IgG antibody.

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement D: aruplab.com/CS

23-Sep-19 11:36:00 MOG Antibody IgG Titer, Serum:
INTERPRETIVE INFORMATION: MOG Antibody IgG Titer, Serum

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement D: aruplab.com/CS

23-Sep-19 11:36:00 Aquaporin-4 Receptor Antibody:
INTERPRETIVE INFORMATION: Aquaporin-4 Receptor Antibody

Negative ..... 2.9 U/mL or less
Positive ..... 3.0 U/mL or greater

Approximately 75 percent of patients with neuromyelitis optica (NMO) express antibodies to the aquaporin-4 (AQP4)receptor. Diagnosis of NMO requires the presence of longitudinally extensive acute myelitis (lesions extending over 3 or more vertebral segments)and optic neuritis. While absense of antibodies to the AQP4 receptor does not rule out the diagnosis of NMO, presence of this antibody is diagnostic for NMO.

23-Sep-19 11:36:00 Voltage-Gated Potassium Channel Ab, Ser:
INTERPRETIVE INFORMATION: Voltage-Gated Potassium Channel (VGKC) Antibody, Serum

Negative ..... 31 pmol/L or less

Indeterminate... 32 - 87 pmol/L
Positive ..... 88 pmol/L or greater

Voltage-Gated Potassium Channel (VGKC) antibodies are associated with neuromuscular weakness as found in neuromyotonia (also known as Issacs syndrome) and Morvan syndrome. VGKC antibodies are also associated with paraneoplastic neurological syndromes and limbic encephalitis; however, VGKC antibody-associated limbic encephalitis may be associated with antibodies to leucine-rich, glioma-inactivated 1 protein (LGI1) or contactin-associated protein-2 (CASPR2) instead of potassium channel antigens. A substantial number of VGKC-antibody positive cases are negative for LGI1 and CASPR2 IgG autoantibodies, not all VGKC complex antigens are known. The clinical significance of this test can only be determined in conjunction with the patient's clinical history and related laboratory testing.

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement D: aruplab.com/CS

23-Sep-19 11:36:00 Glutamic Acid Decarboxylase Antibody:
INTERPRETIVE INFORMATION: Glutamic Acid Decarboxylase Antibody

A value greater than 5.0 IU/mL is considered positive for Glutamic Acid Decarboxylase Antibody (GAD Ab). This assay is intended for the semi-quantitative determination of the GAD Ab in human serum. Results should be interpreted within the context of clinical symptoms.