Client: Example Client ABC123
123 Test Drive
Salt Lake City, UT 84108
UNITED STATES

Physician: Doctor, Example

Patient: Patient, Example

DOB	Unknown
Gender:	Unknown
Patient Identifiers:	01234567890ABCD, 012345
Visit Number (FIN):	01234567890ABCD
Collection Date:	00/00/0000 00:00

Neuronal Nuclear Antibody (ANNA) IFA Titer, IgG, CSF (Do NOT give this test code to clients - Panel Component ONLY. Refer to 2010841.)

ARUP test code 2010843

Neuronal Nuclear Ab Titer, IgG CSF	1:40 *	(Ref Interval: < 1:1)

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab Titer, IgG CSF

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

Autoimmune Myelopathy Panel, CSF

ARUP test code 3006209

Paraneoplastic Abs (PCCA/ANNA) IgG, CSF	ANNA Detected *	(Ref Interval: None Detected)

Antibodies detected, therefore IFA titer and Immunoblot testing to be performed.

INTERPRETIVE INFORMATION: Paraneoplastic Abs (PCCA/ANNA) IgG, CSF

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

NMO/AQP4 Ab IgG CBA-IFA Screen, CSF	Detected *	(Ref Interval: < 1:1)

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

H=High, L=Low, *=Abnormal, C=Critical

INTERPRETIVE INFORMATION: NMO/AQP4 Ab IgG CBA-IFA Screen, CSF

Neuromyelitis optic (NMO) commonly presents with optic neuritis or longitudinally extensive transverse myelitis. Approximately 75 percent of patients with NMO have 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.

This indirect fluorescent antibody assay utilizes AQP4 receptor transfected cell lines for the detection and semiquantification of AQP4 IgG antibody.

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

GABA-BR Ab IgG CBA-IFA Screen, CSF	**Detected**	*	**(Ref Interval: < 1:1)**

GABA-BR Antibody, IgG is detected. Titer results to follow.

INTERPRETIVE INFORMATION: GABA-BR Ab IgG CBA-IFA Screen, CSF

Gamma-amino butyric acid receptor, type B (GABA-BR) antibody is found in a subset of patients with autoimmune epilepsy and other autoimmune neurologic phenotypes; it may occur with or without associated tumor. Decreasing antibody levels may be associated with therapeutic response. A negative test result does not rule out a diagnosis of autoimmune neurologic disease. Results should be interpreted in correlation with the patient's clinical history and other laboratory findings.

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

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

CV2 Ab IgG CBA-IFA Screen, CSF	**Detected**	*	**(Ref Interval: < 1:1)**

CV2 Antibody, IgG is detected. Titer results to follow. Additional charges apply.

H=High, L=Low, *=Abnormal, C=Critical

INTERPRETIVE INFORMATION: CV2 Ab IgG CBA-IFA Screen, CSF

CV2 antibodies aid in discriminating between chronic paraneoplastic neurological disorder (PND) and other inflammatory disorders of the nervous system. Anti-CV2 is associated with small-cell lung cancer and thymoma. A negative test result does not rule out a diagnosis of autoimmune neurologic disease. Results should be interpreted in correlation with the patient's clinical history and other laboratory findings.

This indirect fluorescent antibody assay utilizes CV2 transfected cell lines for the detection and semiquantification of the CV2 IgG antibody.

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.

SOX1 Antibody, IgG by Immunoblot, CSF	**High Positive**	*	**(Ref Interval: Negative)**

INTERPRETIVE INFORMATION: SOX1 Antibody, IgG by Immunoblot, CSF
SOX1 antibody is detected in patients with Lambert-Eaton myasthenic syndrome (LEMS) and in patients with paraneoplastic cerebellar degeneration (PCD), paraneoplastic and nonparaneoplastic neuropathy. SOX1 antibody is associated with small cell lung cancer. A negative test result does not rule out a diagnosis of LEMS or other causes of paraneoplastic neurological syndrome.

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.

Amphiphysin Antibody, CSF	**Positive**	*	**(Ref Interval: Negative)**

INTERPRETIVE INFORMATION: Amphiphysin Antibody IgG, CSF

Amphiphysin antibody is present in about 5 percent of patients with stiff-person syndrome and is found variably in other causes of paraneoplastic neurological syndrome (PNS). Amphiphysin antibody is mainly associated with small-cell lung cancer and breast tumors.

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

DPPX Ab IgG CBA-IFA Screen, CSF	**Detected**	*	**(Ref Interval: < 1:1)**

DPPX Antibody, IgG is detected. Titer results to follow.

H=High, L=Low, *=Abnormal, C=Critical

INTERPRETIVE INFORMATION: DPPX Ab IgG CBA-IFA Screen, CSF

DPPX antibody is found in a subset of patients with autoimmune encephalitis, and is often associated with prodromal gastrointestinal symptoms and unintentional weight loss. It may occur with or without associated tumor. Decreasing antibody levels may be associated with therapeutic response. A negative test result does not rule out a diagnosis of autoimmune neurologic disease. Results should be interpreted in correlation with the patient's clinical history and other laboratory findings.

This indirect fluorescent antibody assay utilizes DPPX transfected cells for the detection and semiquantification of the DPPX IgG antibody.

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.

mGluR1 Ab IgG CBA-IFA Screen, CSF	**Detected** *	**(Ref Interval: < 1:1)**

mGluR1 Antibody, IgG is detected. Titer results to follow.

INTERPRETIVE INFORMATION: mGluR1 Ab IgG CBA-IFA Screen, CSF

Metabotropic glutamate receptor 1 (mGluR1) antibody is found in a subset of patients with autoimmune cerebellar ataxia or autoimmune encephalitis and may occur with or without associated tumor. A negative test result does not rule out a diagnosis of autoimmune cerebellar ataxia or limbic encephalitis. Interpretation of any anti-neural antibody test requires clinical correlation.

This indirect fluorescent antibody assay utilizes mGluR1 transfected cell lines for detection and semi-quantification of mGluR1 IgG antibody.

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.

Glutamic Acid Decarboxylase Antibody CSF	**15.0 IU/mL H**	**(Ref Interval: 0.0-5.0)**

INTERPRETIVE INFORMATION: Glutamic Acid Decarboxylase Antibody, CSF
A value greater than 5.0 IU/mL is considered positive for glutamic acid decarboxylase antibody (GAD AB CSF).

This assay is intended for the semi-quantitative determination of the GAD Ab in human CSF. Results should be interpreted within the context of clinical symptoms.

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

Aquaporin-4 Receptor Antibody Titer, IgG by CBA-IFA, CSF (Reflex for 2011699 AQP4 CSF - Not Orderable by Clients)

ARUP test code 2011701

H=High, L=Low, *=Abnormal, C=Critical

NMO/AQP4 Ab IgG CBA-IFA Titer, CSF	1:20	*	(Ref Interval: < 1:1)

INTERPRETIVE INFORMATION: NMO/AQP4 Ab IgG CBA-IFA Titer, CSF

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

Gamma Aminobutyric Acid Receptor, Type B (GABA-BR) Antibody Titer, IgG by CBA-IFA, CSF (Reflex of 3001267 GABA CSF - Not orderable by clients)

ARUP test code 3001273

GABA-BR Ab IgG CBA-IFA Titer, CSF	1:40	*	(Ref Interval: < 1:1)

INTERPRETIVE INFORMATION: GABA-BR Ab IgG CBA-IFA Titer, CSF

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

CV2 Antibody Titer, IgG by CBA-IFA, CSF (Reflex for 3017001 CV2 CSF - Not orderable by clients)

ARUP test code 3017002

CV2 Ab IgG CBA-IFA Titer, CSF	1:10	*	(Ref Interval: < 1:1)

INTERPRETIVE INFORMATION: CV2 Ab IgG CBA-IFA Titer, CSF

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

Neuronal Nuclear Antibodies (Hu, Ri, Yo, Tr/DNER) IgG by Immunoblot, CSF

ARUP test code 3004527

Neuronal Nuclear Ab (Hu) IgG, IB, CSF	High Positive	*	(Ref Interval: Negative)

H=High, L=Low, *=Abnormal, C=Critical

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab (Hu) IgG, IB, CSF
This test detects IgG antineuronal antibodies to Hu, Ri, and Yo and Tr (DNER) antigens.

Antineuronal antibodies serve as markers that aid in discriminating between a true paraneoplastic neurological disorder (PND) and other inflammatory disorders of the nervous system. Anti-Hu (antineuronal nuclear antibody, type I) is associated with small cell lung cancer. Anti-Ri (antineuronal nuclear antibody, type II) is associated with neuroblastoma in children and with fallopian tube and breast cancer in adults. Anti-Yo (anti-Purkinje cell cytoplasmic antibody) is associated with ovarian and breast cancer. Anti-Tr(DNER) is associated with Hodgkin's lymphoma.

The presence of one or more of these antineuronal antibodies supports a clinical diagnosis of PND and should lead to a focused search for the underlying neoplasm.

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

Neuronal Nuclear Ab (Ri) IgG, IB, CSF	**Positive**	*	**(Ref Interval: Negative)**

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab (Ri) IgG, IB, CSF
This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Neuronal Nuclear Ab (Yo) IgG, IB, CSF	**Positive**	*	**(Ref Interval: Negative)**

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab (Yo) IgG, IB, CSF
This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Neuronal Nuclear Ab (TR/DNER) IgG, CSF	**High Positive**	*	**(Ref Interval: Negative)**

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab (TR/DNER) IgG, CSF
This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Dipeptidyl Aminopeptidase-Like Protein 6 (DPPX) Antibody Titer, IgG by CBA-IFA, CSF (Reflex of 3004512 DPPX CSF - Not orderable by clients)

ARUP test code 3004515

DPPX Ab IgG CBA-IFA Titer, CSF	**1:5**	*	**(Ref Interval: < 1:1)**

H=High, L=Low, *=Abnormal, C=Critical

INTERPRETIVE INFORMATION: DPPX Ab IgG CBA-IFA Titer, CSF

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

Metabotropic Glutamate Receptor 1 (mGluR1) Antibody Titer, IgG by CBA-IFA, CSF (Reflex of MGLUR1 CSF - Not Orderable by Clients)

ARUP test code 3006042

mGluR1 Ab IgG CBA-IFA Titer, CSF	1:80	*	(Ref Interval: < 1:1)

INTERPRETIVE INFORMATION: mGluR1 Ab IgG CBA-IFA Titer, CSF

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.

H=High, L=Low, *=Abnormal, C=Critical

VERIFIED/REPORTED DATES

Procedure	Accession	Collected	Received	Verified/Reported
Neuronal Nuclear Ab Titer, IgG CSF	24-057-100513	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Paraneoplastic Abs (PCCA/ANNA) IgG, CSF	24-057-100513	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
NMO/AQP4 Ab IgG CBA-IFA Titer, CSF	24-057-100513	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
NMO/AQP4 Ab IgG CBA-IFA Screen, CSF	24-057-100513	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
GABA-BR Ab IgG CBA-IFA Screen, CSF	24-057-100513	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
GABA-BR Ab IgG CBA-IFA Titer, CSF	24-057-100513	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
CV2 Ab IgG CBA-IFA Screen, CSF	24-057-100513	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
CV2 Ab IgG CBA-IFA Titer, CSF	24-057-100513	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
SOX1 Antibody, IgG by Immunoblot, CSF	24-057-100513	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Neuronal Nuclear Ab (Hu) IgG, IB, CSF	24-057-100513	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Neuronal Nuclear Ab (Ri) IgG, IB, CSF	24-057-100513	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Neuronal Nuclear Ab (Yo) IgG, IB, CSF	24-057-100513	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Amphiphysin Antibody, CSF	24-057-100513	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
DPPX Ab IgG CBA-IFA Screen, CSF	24-057-100513	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
DPPX Ab IgG CBA-IFA Titer, CSF	24-057-100513	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Neuronal Nuclear Ab (TR/DNER) IgG, CSF	24-057-100513	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
mGluR1 Ab IgG CBA-IFA Screen, CSF	24-057-100513	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
mGluR1 Ab IgG CBA-IFA Titer, CSF	24-057-100513	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00
Glutamic Acid Decarboxylase Antibody CSF	24-057-100513	00/00/0000 00:00	00/00/0000 00:00	00/00/0000 00:00

END OF CHART

H=High, L=Low, *=Abnormal, C=Critical