

**Specimen Collected:** 2/6/2025 09:29 MST

**Neuronal Antibody IgG, Immunoblot, Ser** | **Received:** 2/6/2025 09:36 MST | **Report/Verified:** 2/6/2025 09:41 MST

Procedure	Result	Units	Reference Interval
Neuronal Nuclear Ab (Hu) IgG, IB, Serum	<b>Low Positive * f1 i1</b>		[Negative]
Neuronal Nuclear Ab (Ri) IgG, IB, Serum	<b>Positive * i2</b>		[Negative]
Purkinje Cell Ab (Yo) IgG, IB, Ser	<b>High Positive * i3</b>		[Negative]
Purkinje Cell Ab (TR/DNER) IgG, IB, Ser	<b>Positive * i4</b>		[Negative]

**Paraneoplastic Reflex Panel** | **Received:** 2/6/2025 09:36 MST | **Report/Verified:** 2/6/2025 09:41 MST

Procedure	Result	Units	Reference Interval
Neuronal Antibody (Amphiphysin)	<b>Positive * i5</b>		[Negative]
Purkinje Cell/Neuronal Nuclear IgG Scrn	<b>PCCA Detected * f2 i6</b>		[None Detected]
CV2 Ab IgG CBA-IFA Screen, Serum	<b>Detected * t1 i7</b>		[<1:100]
SOX1 Antibody, IgG by Immunoblot, Serum	<b>High Positive * i8</b>		[Negative]
Ma2/Ta Antibody, IgG by Immunoblot, Ser	<b>Positive * i9</b>		[Negative]

**Purkinje Cell Ab Titer, IgG** | **Received:** 2/6/2025 09:36 MST | **Report/Verified:** 2/6/2025 09:41 MST

Procedure	Result	Units	Reference Interval
Purkinje Cell Antibody Titer IgG	<b>1:40 * i10</b>		[<1:10]

**CV2 Ab IgG Titer by CBA-IFA, Ser** | **Received:** 2/6/2025 09:36 MST | **Report/Verified:** 2/6/2025 09:41 MST

Procedure	Result	Units	Reference Interval
CV2 Ab IgG CBA-IFA Titer, Serum	<b>1:800 * i11</b>		[<1:100]

**Interpretive Text**

t1: 2/6/2025 09:29 MST (CV2 Ab IgG CBA-IFA Screen, Serum)  
CV2 Antibody, IgG is detected. Titer results to follow. Additional charges apply.

**Result Footnote**

f1: Neuronal Nuclear Ab (Hu) IgG, IB, Serum

Low positive reactivity to Hu detected. Strong clinical correlation is recommended.

f2: Purkinje Cell/Neuronal Nuclear IgG Scrn

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

**Test Information**

i1: Neuronal Nuclear Ab (Hu) IgG, IB, Serum

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab IgG, Immunoblot, Ser

This test detects IgG antineuronal antibodies to Hu, Ri, Yo and Tr (DNER) antigens.

\*=Abnormal, #=Corrected, C=Critical, f=Result Footnote, H-High, i-Test Information, L-Low, t-Interpretive Text, @=Performing lab

**Unless otherwise indicated, testing performed at:**

**ARUP Laboratories**

500 Chipeta Way, Salt Lake City, UT 84108

Laboratory Director: Jonathan R. Genzen, MD, PhD

**ARUP Accession:** 25-037-900070

**Report Request ID:** 20291641

**Printed:** 2/10/2025 08:31 MST

**Test Information**

i1: Neuronal Nuclear Ab (Hu) IgG, IB, Serum

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 detected by both immunoblot (IB) and immunofluorescence (IFA) supports a clinical diagnosis of PND and should lead to a focused search for the underlying neoplasm. A positive IB result but negative IFA result is of questionable clinical significance. Thus, strong clinical correlation is recommended.

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.

i2: Neuronal Nuclear Ab (Ri) IgG, IB, Serum

INTERPRETIVE INFORMATION: Neuronal Nuclear Ab (Ri) IgG, IB,  
Serum

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.

i3: Purkinje Cell Ab (Yo) IgG, IB, Ser

INTERPRETIVE INFORMATION: Purkinje Cell Ab (Yo) IgG, IB, Ser

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.

i4: Purkinje Cell Ab (TR/DNER) IgG, IB, Ser

INTERPRETIVE INFORMATION: Purkinje Cell Ab (TR/DNER) IgG,  
IB, Ser

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i5: Neuronal Antibody (Amphiphysin)

INTERPRETIVE INFORMATION: Amphiphysin Antibody, IgG

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**Test Information**

i5: Neuronal Antibody (Amphiphysin)  
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.

i6: Purkinje Cell/Neuronal Nuclear IgG Scrn  
INTERPRETIVE INFORMATION: Purkinje Cell/Neuronal Nuclear IgG Scrn

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.

i7: CV2 Ab IgG CBA-IFA Screen, Serum  
INTERPRETIVE INFORMATION: CV2 Ab IgG CBA-IFA Screen, Serum

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 US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

i8: SOX1 Antibody, IgG by Immunoblot, Serum  
INTERPRETIVE INFORMATION: SOX1 Antibody, IgG by Immunoblot, Serum

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

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**Test Information**

i8: SOX1 Antibody, IgG by Immunoblot, Serum  
Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes.

i9: Ma2/Ta Antibody, IgG by Immunoblot, Ser  
INTERPRETIVE INFORMATION: Ma2/Ta Antibody, IgG by Immunoblot, Ser  
IgG antibodies to Ma2/Ta are associated with paraneoplastic neurologic syndromes with phenotypes most often including a combination of limbic encephalitis, diencephalic encephalitis, and brainstem encephalitis. Patients with anti-Ma2/Ta paraneoplastic neurologic syndromes should be thoroughly evaluated for cancer, including testicular cancer and adenocarcinoma, as neurologic symptoms often precede cancer diagnosis. Use of immune checkpoint inhibitors has also been associated with an increased risk of anti-Ma2 paraneoplastic neurologic disease. Consider sending testing in CSF as well as serum to improve diagnostic yield. Results (positive or negative) should be interpreted in the context of the patient's complete clinical picture, as false positives may occur and a negative result does not exclude the diagnosis of paraneoplastic neurologic disease.

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.

i10: Purkinje Cell Antibody Titer IgG  
INTERPRETIVE INFORMATION: Purkinje Cell Ab Titer, IgG

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.

i11: CV2 Ab IgG CBA-IFA Titer, Serum  
INTERPRETIVE INFORMATION: CV2 Ab IgG CBA-IFA Titer, Serum

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