MAYO CLINIC LABORATORIES

# Test Definition: CNEI

Peripheral Nervous System Comprehensive Neuropathy, Autoimmune Evaluation Interpretation, Serum (Non-Orderable)

## Overview

### Useful For

**Only orderable as part of a profile**. For more information see CNES / Peripheral Nervous System Comprehensive Neuropathy, Autoimmune Evaluation, Serum.

Interpretation for the Peripheral Nervous System Comprehensive Neuropathy, Autoimmune Evaluation

### Method Name

Only orderable as part of a profile. For more information see CNES / Peripheral Nervous System Comprehensive Neuropathy, Autoimmune Evaluation, Serum.

Technical Interpretation

### NY State Available

Yes

## Specimen

### Specimen Type

Serum

### Specimen Required

Only orderable as part of a profile. For more information see CNES / Peripheral Nervous System Comprehensive Neuropathy, Autoimmune Evaluation, Serum.

### Specimen Stability Information

| Specimen Type | Temperature | Time | Special Container |
|---|---|---|---|
| Serum | Refrigerated (preferred) | 28 days | |
| | Ambient | 72 hours | |
| | Frozen | 28 days | |

## Clinical & Interpretive

### Clinical Information

This evaluation detects autoantibodies associated with autoimmune and paraneoplastic neuropathies. The panel

includes antibodies targeting peripheral nerve, dorsal root ganglia, and nodal/paranodal antigens, improving detection across diverse neuropathy phenotypes.

Reflex testing is performed to confirm and further characterize antibody reactivity, enhancing diagnostic sensitivity.

Appropriate for patients with subacute or progressive neuropathy, atypical or asymmetric presentations, autonomic involvement, or suspected immune-mediated or paraneoplastic etiologies.

## Reference Values

Only orderable as part of a profile. For more information see CNES / Peripheral Nervous System Comprehensive Neuropathy, Autoimmune Evaluation, Serum.

An interpretive report will be provided.

## Interpretation

The presence of specific autoantibodies and/or combinations of antibodies in this panel provides supportive evidence of an immune-mediated peripheral neuropathy. However, these results must be interpretated in the appropriate clinical context. A negative result does not exclude the possibility of an immune mediated peripheral neuropathy.

## Cautions

Negative results do not exclude a diagnosis of an immune-mediated neuropathy. Autoantibody results should always be correlated with the clinical phenotype. The use of immunotherapy prior to sample collection may result in either false positive or false negative results.

The use of immunotherapy prior to sample collection may result in either false-positive or false-negative results.

## Clinical Reference

1. Shelly S, Klein CJ, Dyck PJB, et al. Neurofascin-155 immunoglobulin subtypes: Clinicopathologic associations and neurologic outcomes. Neurology. 2021;97(24): e2392-e2403
2. Dubey D, Honorat JA, Shelly S, et al. Contactin-1 autoimmunity: Serologic, neurologic, and pathologic correlates. Neurol Neuroimmunol Neuroinflamm. 2020;7(4)e771
3. Paramasivan NK, Basal E, LaFrance-Corey RG, et al. Clinical Insights Into CASPR1 and CASPR1/contactin-1 complex autoimmune nodopathies. Neurology. 2026;106(5):e214403. doi:10.1212/WNL.0000000000214403
4. Klein CJ, Triplett JD, Murray DL, et al. Optimizing anti-myelin-associated glycoprotein and IgM-gammopathy testing for neuropathy treatment evaluation. Neurology. 2024;103(11):e210000. doi:10.1212/WNL.0000000000210000
5. Dubey D, Lennon VA, Gadoth A, et al. Autoimmune CRMP5 neuropathy phenotype and outcome defined from 105 cases. Neurology. 2018;90(2):e103-e110. doi:10.1212/WNL.0000000000004803
6. Dubey D, Jitprapaikulsan J, Bi H, et al. Amphiphysin-IgG autoimmune neuropathy: A recognizable clinicopathologic syndrome. Neurology. 2019;93(20):e1873-e1880. doi:10.1212/WNL.0000000000008472
7. Dubey D. Autoimmune neuromuscular disorders associated with neural antibodies. Continuum (Minneap Minn). 2024;30(4):1136-1159. doi:10.1212/CON.0000000000001461

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## Performance

### Method Description
An interpretation based on test results is generated by the laboratory information system.

### PDF Report
No

### Day(s) Performed
Monday through Sunday

### Report Available
8 to 12 days

### Performing Laboratory Location
Mayo Clinic Laboratories - Rochester Main Campus

## 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
Not Applicable

### LOINC® Information

| Test ID | Test Order Name | Order LOINC® Value |
|---|---|---|
| CNEI | Comprehensive Neuropathy Interp, S | No LOINC Needed |

| Result ID | Test Result Name | Result LOINC® Value |
|---|---|---|
| 621106 | Comprehensive Neuropathy Interp, S | 69048-7 |
| 624190 | IFA Notes | 48767-8 |