

**Reporting Title:** Paraneoplastic Autoantibody Eval, S**Performing Location:** Mayo Clinic Laboratories - Rochester Main Campus**Ordering Guidance:**

This test **no longer contains all known, clinically relevant antibodies** for patients suspected of autoimmune neurological disorders. Instead, consider a comprehensive neurological phenotype-specific autoimmune/paraneoplastic evaluation (eg, encephalopathy, movement disorders, myelopathy, axonal neuropathy). For more information as well as phenotype-specific testing options, refer to [Autoimmune Neurology Test Ordering Guide](#) or the [Neurology specialty website](#).

This test **should not be requested** for patients who have recently received radioisotopes, therapeutically or diagnostically, because of potential assay interference. The specific waiting period before specimen collection will depend on the isotope administered, the dose given, and the clearance rate in the individual patient. Specimens will be screened for radioactivity prior to analysis. Radioactive specimens received in the laboratory will be held 1 week and assayed if sufficiently decayed or canceled if radioactivity remains.

**Necessary Information:**

Provide the following information:

-Relevant clinical information

-Ordering healthcare professional's name, phone number, mailing address, and email address

**Specimen Requirements:****Patient Preparation:** For optimal antibody detection, specimen collection is recommended before starting immunosuppressant medication or intravenous immunoglobulin (IVIg) treatment.**Supplies:** Sarstedt Aliquot Tube, 5 mL (T914)**Collection Container/Tube:****Preferred:** Red top**Acceptable:** Serum gel**Submission Container/Tube:** Plastic vial**Specimen Volume:** 4 mL**Collection Instructions:** Centrifuge and aliquot serum into a plastic vial.**Forms:**

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

**Result Codes:**

Result ID	Reporting Name	Type	Unit	LOINC®
89080	AGNA-1, S	Alphanumeric		84927-3

81722	Amphiphysin Ab, S	Alphanumeric		72327-0
80150	ANNA-1, S	Alphanumeric		33615-6
80776	ANNA-2, S	Alphanumeric		43187-4
83137	ANNA-3, S	Alphanumeric		43102-3
83077	CRMP-5-IgG, S	Alphanumeric		72504-4
29347	Interpretive Comments	Alphanumeric		57771-8
618905	IFA Notes	Alphanumeric		48767-8
83138	PCA-2, S	Alphanumeric		84925-7
9477	PCA-1, S	Alphanumeric		84924-0
83076	PCA-Tr, S	Alphanumeric		84926-5

LOINC® and CPT codes are provided by the performing laboratory.

### Supplemental Report:

No

### Components:

Test Id	Reporting Name	CPT Units	CPT Code	Always Performed	Available Separately
PAINT	Interpretive Comments			Yes	No
AMPHS	Amphiphysin Ab, S	1	86255	Yes	No
AGN1S	Anti-Glial Nuclear Ab, Type 1	1	86255	Yes	No
ANN1S	Anti-Neuronal Nuclear Ab, Type 1	1	86255	Yes	No
ANN2S	Anti-Neuronal Nuclear Ab, Type 2	1	86255	Yes	No
ANN3S	Anti-Neuronal Nuclear Ab, Type 3	1	86255	Yes	No
CRMS	CRMP-5-IgG, S	1	86255	Yes	No
PCABP	Purkinje Cell Cytoplasmic Ab Type 1	1	86255	Yes	No
PCAB2	Purkinje Cell Cytoplasmic Ab Type 2	1	86255	Yes	No
PCATR	Purkinje Cell Cytoplasmic Ab Type Tr	1	86255	Yes	No

### CPT Code Information:

86255 x 9

84182-AGNBS (if appropriate)

86256-AGNTS (if appropriate)

84182-AMIBS (if appropriate)

86256-APHTS (if appropriate)

84182-AN1BS (if appropriate)

86256 AN1TS (if appropriate)

84182-AN2BS (if appropriate)

86256 AN2TS (if appropriate)

86256 AN3TS (if appropriate)

86256 CRMTS (if appropriate)

84182-CRMWS (if appropriate)  
 84182-PC1BS (if appropriate)  
 86256 PC1TS (if appropriate)  
 86256 PC2TS (if appropriate)  
 84182-PCTBS (if appropriate)  
 86256 PCTTS (if appropriate)

**Reflex Tests:**

Test Id	Reporting Name	CPT Units	CPT Code	Always Performed	Available Separately
AGNBS	AGNA-1 Immunoblot, S	1	84182	No	No
AMIBS	Amphiphysin Immunoblot, S	1	84182	No	No
AN1BS	ANNA-1 Immunoblot, S	1	84182	No	No
AN2BS	ANNA-2 Immunoblot, S	1	84182	No	No
CRMWS	CRMP-5-IgG Western Blot, S	1	84182	No	Yes
PC1BS	PCA-1 Immunoblot, S	1	84182	No	No
PCTBS	PCA-Tr Immunoblot, S	1	84182	No	No
AGNTS	AGNA-1 Titer, S	1	86256	No	No
APHTS	Amphiphysin Ab Titer, S	1	86256	No	No
AN1TS	ANNA-1 Titer, S	1	86256	No	No
AN3TS	ANNA-3 Titer, S	1	86256	No	No
CRMTS	CRMP-5-IgG Titer, S	1	86256	No	No
PC1TS	PCA-1 Titer, S	1	86256	No	No
PC2TS	PCA-2 Titer, S	1	86256	No	No
PCTTS	PCA-Tr Titer, S	1	86256	No	No
AN2TS	ANNA-2 Titer, S	1	86256	No	No

**Result Codes for Reflex Tests:**

Test ID	Result ID	Reporting Name	Type	Unit	LOINC®
CRMWS	83107	CRMP-5-IgG Western Blot, S	Alphanumeric		47401-5
AGNBS	607270	AGNA-1 Immunoblot, S	Alphanumeric		83001-8
AMIBS	607268	Amphiphysin Immunoblot, S	Alphanumeric		94385-2
AN2BS	607262	ANNA-2 Immunoblot, S	Alphanumeric		94387-8
AN1BS	607260	ANNA-1 Immunoblot, S	Alphanumeric		94389-4
PC1BS	607264	PCA-1 Immunoblot, S	Alphanumeric		94271-4
PCTBS	607266	PCA-Tr Immunoblot, S	Alphanumeric		82999-4
AN2TS	43432	ANNA-2 Titer, S	Alphanumeric	titer	94343-1
PC2TS	43438	PCA-2 Titer, S	Alphanumeric	titer	94351-4
AN3TS	43433	ANNA-3 Titer, S	Alphanumeric	titer	94344-9
AGNTS	43434	AGNA-1 Titer, S	Alphanumeric	titer	94341-5
PC1TS	43437	PCA-1 Titer, S	Alphanumeric	titer	94350-6
APHTS	618165	Amphiphysin Ab Titer, S	Alphanumeric	titer	94340-7

AN1TS	43431	ANNA-1 Titer, S	Alphanumeric	titer	94342-3
CRMTS	43436	CRMP-5-IgG Titer, S	Alphanumeric	titer	94815-8
PCTTS	43439	PCA-Tr Titer, S	Alphanumeric	titer	94352-2

## Reference Values:

Test ID	Reporting name	Methodology*	Reference value
PAINT	Interpretive Comments	Medical interpretation	Not applicable
AMPHS	Amphiphysin Ab, S	IFA	Negative
AGN1S	Anti-Glial Nuclear Ab, Type 1	IFA	Negative
ANN1S	Anti-Neuronal Nuclear Ab, Type 1	IFA	Negative
ANN2S	Anti-Neuronal Nuclear Ab, Type 2	IFA	Negative
ANN3S	Anti-Neuronal Nuclear Ab, Type 3	IFA	Negative
CRMS	CRMP-5-IgG, S	IFA	Negative
PCABP	Purkinje Cell Cytoplasmic Ab Type 1	IFA	Negative
PCAB2	Purkinje Cell Cytoplasmic Ab Type 2	IFA	Negative
PCATR	Purkinje Cell Cytoplasmic Ab Type Tr	IFA	Negative

## Reflex Tests:

Test ID	Reporting name	Methodology*	Reference value
AGNBS	AGNA-1 Immunoblot, S	IB	Negative
AGNTS	AGNA-1 Titer, S	IFA	<1:240
AMIBS	Amphiphysin Immunoblot, S	IB	Negative
AN1BS	ANNA-1 Immunoblot, S	IB	Negative
AN1TS	ANNA-1 Titer, S	IFA	<1:240
AN2BS	ANNA-2 Immunoblot, S	IB	Negative
AN2TS	ANNA-2 Titer, S	IFA	<1:240
AN3TS	ANNA-3 Titer, S	IFA	<1:240
APHTS	Amphiphysin Ab Titer, S	IFA	<1:240
CRMTS	CRMP-5-IgG Titer, S	IFA	<1:240
CRMWS	CRMP-5-IgG Western Blot, S	WB	Negative
PC1BS	PCA-1 Immunoblot, S	IB	Negative
PC1TS	PCA-1 Titer, S	IFA	<1:240
PC2TS	PCA-2 Titer, S	IFA	<1:240
PCTBS	PCA-Tr Immunoblot, S	IB	Negative
PCTTS	PCA-Tr Titer, S	IFA	<1:240

\*Methodology abbreviations:

Immunofluorescence assay (IFA)

Western blot (WB)

Immunoblot (IB)

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Neuron-restricted patterns of IgG staining that do not fulfill criteria for amphiphysin, ANNA-1, ANNA-2, ANNA-3, AGNA-1, PCA-1, PCA-2, PCA-Tr, or CRMP-5-IgG may be reported as "unclassified antineuronal IgG." Complex patterns that include non-neuronal elements may be reported as "uninterpretable."

**Note:** CRMP-5 titers lower than 1:240 are detectable by recombinant CRMP-5 Western blot analysis. CRMP-5 Western blot analysis will be done on request on stored serum (held 4 weeks). This supplemental testing is recommended in cases of chorea, vision loss, cranial neuropathy, and myelopathy. Call 800-533-1710 to request CRMP-5 Western blot.