Reporting Title: Paraneoplastic Autoantibody Eval, S
Performing Location: Rochester

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 provider name, phone number, mailing address, and e-mail address

Specimen Requirements:
Patient Preparation: For optimal antibody detection, specimen collection is recommended prior to initiation of immunosuppressant medication or intravenous immunoglobulin 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.

Specimen Minimum Volume:
2 mL

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

	Ambient	72 hours	

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
29347	Interpretive Comments	Alphanumeric		57771-8
618905	IFA Notes	Alphanumeric		48767-8
81722	Amphiphysin Ab, S	Alphanumeric		72327-0
89080	AGNA-1, S	Alphanumeric		84927-3
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
89165	Neuronal (V-G) K+ Channel Ab, S	Numeric	nmol/L	97560-7
81185	P/Q-Type Calcium Channel Ab	Numeric	nmol/L	94349-8
9477	PCA-1, S	Alphanumeric		84924-0
83138	PCA-2, S	Alphanumeric		84925-7
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	Orderable Separately
PAINT	Interpretive Comments			Yes	No
AMPHS	Amphiphysin Ab, S			Yes	No
AGN1S	Anti-Glial Nuclear Ab, Type 1			Yes	No
ANN1S	Anti-Neuronal Nuclear Ab, Type 1			Yes	No
ANN2S	Anti-Neuronal Nuclear Ab, Type 2			Yes	No

Test ID	Reporting Name	CPT Units	CPT Code	Always Performed	Orderable Separately
ANN3S	Anti-Neuronal Nuclear Ab, Type 3			Yes	No
CRMS	CRMP-5-IgG, S			Yes	No
VGKC	Neuronal (V-G) K+ Channel Ab, S			Yes	No
CCPQ	P/Q-Type Calcium Channel Ab			Yes	No
PCABP	Purkinje Cell Cytoplasmic Ab Type 1			Yes	No
PCAB2	Purkinje Cell Cytoplasmic Ab Type 2			Yes	No
PCATR	Purkinje Cell Cytoplasmic Ab Type Tr			Yes	No

CPT Code Information:

83519
86596
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)
86255-CS2CS (if appropriate)
84182-CRMWS (if appropriate)
86255-LG1CS (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	Orderable Separately
AGNBS	AGNA-1 Immunoblot, S			No	No

Test ID	Reporting Name	CPT Units	CPT Code	Always Performed	Orderable Separately
AMIBS	Amphiphysin Immunoblot, S			No	No
AN1BS	ANNA-1 Immunoblot, S			No	No
AN2BS	ANNA-2 Immunoblot, S			No	No
CS2CS	CASPR2-IgG CBA, S			No	No
CRMWS	CRMP-5-IgG Western Blot, S			No	Yes
LG1CS	LGI1-IgG CBA, S			No	No
PC1BS	PCA-1 Immunoblot, S			No	No
PCTBS	PCA-Tr Immunoblot, S			No	No
AGNTS	AGNA-1 Titer, S			No	No
APHTS	Amphiphysin Ab Titer, S			No	No
AN1TS	ANNA-1 Titer, S			No	No
AN3TS	ANNA-3 Titer, S			No	No
CRMTS	CRMP-5-IgG Titer, S			No	No
PC1TS	PCA-1 Titer, S			No	No
PC2TS	PCA-2 Titer, S			No	No
PCTTS	PCA-Tr Titer, S			No	No
AN2TS	ANNA-2 Titer, S			No	No

Result Codes for Reflex Tests:

Test ID	Result ID	Reporting Name	Type	Unit	LOINC®
AGNBS	607270	AGNA-1 Immunoblot, S	Alphanumeric		83001-8
AMIBS	607268	Amphiphysin Immunoblot, S	Alphanumeric		94385-2
AN1BS	607260	ANNA-1 Immunoblot, S	Alphanumeric		94389-4
AN2BS	607262	ANNA-2 Immunoblot, S	Alphanumeric		94387-8
CS2CS	64281	CASPR2-IgG CBA, S	Alphanumeric		94285-4
CRMWS	83107	CRMP-5-IgG Western Blot, S	Alphanumeric		47401-5
LG1CS	64279	LGI1-IgG CBA, S	Alphanumeric		94287-0
PC1BS	607264	PCA-1 Immunoblot, S	Alphanumeric		94271-4
PCTBS	607266	PCA-Tr Immunoblot, S	Alphanumeric		82999-4

Test ID	Result ID	Reporting Name	Type	Unit	LOINC®
AGNTS	43434	AGNA-1 Titer, S	Alphanumeric	titer	94341-5
APHTS	618165	Amphiphysin Ab Titer, S	Alphanumeric	titer	94340-7
AN1TS	43431	ANNA-1 Titer, S	Alphanumeric	titer	94342-3
AN3TS	43433	ANNA-3 Titer, S	Alphanumeric	titer	94344-9
CRMTS	43436	CRMP-5-IgG Titer, S	Alphanumeric	titer	94815-8
PC1TS	43437	PCA-1 Titer, S	Alphanumeric	titer	94350-6
PC2TS	43438	PCA-2 Titer, S	Alphanumeric	titer	94351-4
PCTTS	43439	PCA-Tr Titer, S	Alphanumeric	titer	94352-2
AN2TS	43432	ANNA-2 Titer, S	Alphanumeric	titer	94343-1

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
VGKC	Neuronal (V-G) K+ Channel Ab, S	RIA	< or =0.02 nmol/L
CCPQ	P/Q-Type Calcium Channel Ab	RIA	< or =0.02 nmol/L
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
CS2CS	CASPR2-IgG CBA, S	CBA	Negative
CRMWS	CRMP-5-IgG Western Blot, S	WB	Negative
LG1CS	LGI1-IgG CBA, S	CBA	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)
Cell-binding assay (CBA)
Western blot (WB)
Radioimmunoassay (RIA)
Immunoblot (IB)

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.