
Reporting Title: Epilepsy, Autoimm/Paraneo, S**Performing Location:** Mayo Clinic Laboratories - Rochester Main Campus**Ordering Guidance:**

Multiple neurological phenotype-specific autoimmune/paraneoplastic evaluations are available. For more information as well as phenotype-specific testing options, see [Autoimmune Neurology Test Ordering Guide](#).

When more than one evaluation is ordered on the same order number, the duplicate test will be canceled.

For a list of antibodies performed with each evaluation, see [Autoimmune Neurology Antibody Matrix](#).

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 prior to initiation of 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:

[If not ordering electronically, complete, print, and send a Neurology Specialty Testing Client Test Request](#) (T732) with the specimen.

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
81596	GAD65 Ab Assay, S	Numeric	nmol/L	30347-9
83138	PCA-2, S	Alphanumeric		84925-7
83076	PCA-Tr, S	Alphanumeric		84926-5
61516	NMDA-R Ab CBA, S	Alphanumeric		93503-1
61518	AMPA-R Ab CBA, S	Alphanumeric		93489-3
61519	GABA-B-R Ab CBA, S	Alphanumeric		93428-1
34259	Epilepsy, Interpretation, S	Alphanumeric		69048-7
618898	IFA Notes	Alphanumeric		48767-8
64279	LGI1-IgG CBA, S	Alphanumeric		94287-0
64281	CASPR2-IgG CBA, S	Alphanumeric		94285-4
64933	DPPX Ab CBA, S	Alphanumeric		94676-4
64928	mGluR1 Ab IFA, S	Alphanumeric		94347-2
605155	GFAP IFA, S	Alphanumeric		94346-4
615867	Neurochondrin IFA, S	Alphanumeric		101452-1
616445	TRIM46 Ab IFA, S	Alphanumeric		105525-0
620068	PDE10A Ab IFA, S	Alphanumeric		103842-1

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
AEPSI	Epilepsy, Interpretation, S			Yes	No
AMPCS	AMPA-R Ab CBA, S	1	86255	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
CS2CS	CASPR2-IgG CBA, S	1	86255	Yes	No
CRMS	CRMP-5-IgG, S	1	86255	Yes	No
DPPCS	DPPX Ab CBA, S	1	86255	Yes	No

GABCS	GABA-B-R Ab CBA, S	1	86255	Yes	No
GD65S	GAD65 Ab Assay, S	1	86341	Yes	Yes
GFAIS	GFAP IFA, S	1	86255	Yes	No
LG1CS	LGI1-IgG CBA, S	1	86255	Yes	No
GL1IS	mGluR1 Ab IFA, S	1	86255	Yes	No
NCDIS	Neurochondrin IFA, S	1	86255	Yes	No
NMDCS	NMDA-R Ab CBA, S	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
PDEIS	PDE10A Ab IFA, S	1	86255	Yes	No
T46IS	TRIM46 Ab IFA, S	1	86255	Yes	No

CPT Code Information:

86255 x 19

86341

84182-AGNBS (if appropriate)

86256-AGNTS (if appropriate)

86256-AMPIS (if appropriate)

84182-AMIBS (if appropriate)

84182-AN1BS (if appropriate)

86256-AN1TS (if appropriate)

84182-AN2BS (if appropriate)

86256-AN2TS (if appropriate)

86256-AN3TS (if appropriate)

86256-APHTS (if appropriate)

86256-CRMTS (if appropriate)

84182-CRMWS (if appropriate)

86256-DPPTS (if appropriate)

86256-GABIS (if appropriate)

86255-GFACS (if appropriate)

86256-GFATS (if appropriate)

86255-GL1CS (if appropriate)

86256-GL1TS (if appropriate)

86255-NCDCS (if appropriate)

86256-NCDTS (if appropriate)

86256-NMDIS (if appropriate)

86256-PC2TS (if appropriate)

84182-PCTBS (if appropriate)

86256-PCTTS (if appropriate)

86256-PDETS (if appropriate)

86255-T46CS (if appropriate)

86256-T46TS (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
AMPIS	AMPA-R Ab IF Titer Assay, S	1	86256	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
DPPTS	DPPX Ab IFA Titer, S	1	86256	No	No
GABIS	GABA-B-R Ab IF Titer Assay, S	1	86256	No	No
GFACS	GFAP CBA, S	1	86255	No	No
GFATS	GFAP IFA Titer, S	1	86256	No	No
GL1CS	mGluR1 Ab CBA, S	1	86255	No	No
GL1TS	mGluR1 Ab IFA Titer, S	1	86256	No	No
NMDIS	NMDA-R Ab IF Titer Assay, S	1	86256	No	No
PCTBS	PCA-Tr Immunoblot, S	1	84182	No	No
AGNTS	AGNA-1 Titer, S	1	86256	No	No
AN1TS	ANNA-1 Titer, S	1	86256	No	No
AN2TS	ANNA-2 Titer, S	1	86256	No	No
AN3TS	ANNA-3 Titer, S	1	86256	No	Yes
APHTS	Amphiphysin Ab Titer, S	1	86256	No	No
CRMTS	CRMP-5-IgG Titer, S	1	86256	No	No
NCDCS	Neurochondrin CBA, S	1	86255	No	No
NCDTS	Neurochondrin IFA Titer, S	1	86256	No	No
PC2TS	PCA-2 Titer, S	1	86256	No	No
PCTTS	PCA-Tr Titer, S	1	86256	No	No
PDETS	PDE10A Ab IFA Titer, S	1	86256	No	No
T46CS	TRIM46 Ab CBA, S	1	86255	No	No
T46TS	TRIM46 Ab IFA 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
AMPIS	61504	AMPA-R Ab IF Titer Assay, S	Alphanumeric	titer	93490-1
GABIS	61505	GABA-B-R Ab IF Titer Assay, S	Alphanumeric	titer	93427-3
NMDIS	61497	NMDA-R Ab IF Titer Assay, S	Alphanumeric	titer	In Process
DPPTS	64992	DPPX Ab IFA Titer, S	Alphanumeric	titer	94675-6
GL1CS	64932	mGluR1 Ab CBA, S	Alphanumeric		93498-4
GL1TS	64990	mGluR1 Ab IFA Titer, S	Alphanumeric	titer	93499-2
GFATS	605133	GFAP IFA Titer, S	Alphanumeric	titer	93423-2

GFACS	605153	GFAP CBA, S	Alphanumeric		93424-0
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
PCTBS	607266	PCA-Tr Immunoblot, S	Alphanumeric		82999-4
AN2TS	43432	ANNA-2 Titer, S	Alphanumeric	titer	94343-1
NDCS	615865	Neurochondrin CBA, S	Alphanumeric		101450-5
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
APHTS	618165	Amphiphysin Ab Titer, S	Alphanumeric	titer	94340-7
AN1TS	43431	ANNA-1 Titer, S	Alphanumeric	titer	94342-3
NCDTS	616111	Neurochondrin IFA Titer, S	Alphanumeric	titer	In Process
CRMTS	43436	CRMP-5-IgG Titer, S	Alphanumeric	titer	94815-8
PCTTS	43439	PCA-Tr Titer, S	Alphanumeric	titer	94352-2
T46CS	616449	TRIM46 Ab CBA, S	Alphanumeric		105525-0
PDETS	620070	PDE10A Ab IFA Titer, S	Alphanumeric	titer	105523-5
T46TS	616447	TRIM46 Ab IFA Titer, S	Alphanumeric	titer	105527-6

Reference Values:

Test ID	Reporting Name	Methodology*	Reference Value
AEPSI	Epilepsy, Interpretation, S	Medical interpretation	Interpretive report
AMPCS	AMPA-R Ab CBA, S	CBA	Negative
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
CS2CS	CASPR2-IgG CBA, S	CBA	Negative
CRMS	CRMP-5-IgG, S	IFA	Negative
DPPCS	DPPX Ab CBA, S	CBA	Negative
GABCS	GABA-B-R Ab CBA, S	CBA	Negative
GD65S	GAD65 Ab Assay, S	RIA	< or =0.02 nmol/L Reference values apply to all ages
GFAIS	GFAP IFA, S	IFA	Negative
LG1CS	LGI1-IgG CBA, S	CBA	Negative
GL1IS	mGluR1 Ab IFA, S	IFA	Negative
NCDIS	Neurochondrin IFA, S	IFA	Negative

NMDCS	NMDA-R Ab CBA, S	CBA	Negative
PCAB2	Purkinje Cell Cytoplasmic Ab Type 2	IFA	Negative
PCATR	Purkinje Cell Cytoplasmic Ab Type Tr	IFA	Negative
PDEIS	PDE10A Ab IFA, S	IFA	Negative
T46IS	TRIM46 Ab IFA, S	IFA	Negative

Reflex Information:

Test ID	Reporting Name	Methodology*	Reference Value
AGNBS	AGNA-1 Immunoblot, S	IB	Negative
AGNTS	AGNA-1 Titer, S	IFA	<1:240
AMPIS	AMPA-R Ab IF Titer Assay, 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
DPPTS	DPPX Ab IFA Titer, S	IFA	<1:240
GABIS	GABA-B-R Ab IF Titer Assay, S	IFA	<1:240
GFACS	GFAP CBA, S	CBA	Negative
GFATS	GFAP IFA Titer, S	IFA	<1:240
GL1CS	mGluR1 Ab CBA, S	CBA	Negative
GL1TS	mGluR1 Ab IFA Titer, S	IFA	<1:240
NCDCS	Neurochondrin CBA, S	CBA	Negative
NCDTS	Neurochondrin IFA Titer, S	IFA	<1:240
NMDIS	NMDA-R Ab IF Titer Assay, 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
PDETS	PDE10A Ab IFA Titer, S	IFA	<1:240
T46CS	TRIM46 Ab CBA, S	CBA	Negative
T46TS	TRIM46 Ab IFA 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 ANNA-1, ANNA-2, ANNA-3, PCA-2, or PCA-Tr may be reported as "unclassified anti-neuronal IgG." Complex patterns that include nonneuronal 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 the Neuroimmunology Laboratory at 800-533-1710 to request CRMP-5 Western blot.