

Reporting Title: Enceph, Autoimm/Paraneo, CSF
Performing Location: Rochester

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

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

This test is intended to be ordered for **adult** patients. If this test is ordered for a patient younger than 18 years of age, it will be canceled and automatically reordered by the laboratory as PCDEC / Pediatric Autoimmune Encephalopathy/CNS Disorder Evaluation, Spinal Fluid. The pediatric autoimmune CNS disorders evaluation is part of an evolving approach to testing for autoimmune neurological disorders using phenotypic-specific evaluations that include multiple antibodies known for their disease association.

Necessary Information:
Provide the following information:
-Relevant clinical information
-Ordering provider name, phone number, mailing address, and e-mail address

Specimen Requirements:
Container/Tube: Sterile vial
Specimen Volume: 4 mL

Forms:
If not ordering electronically, complete, print, and send 1 of the following with the specimen:
[-Neurology Specialty Testing Client Test Request](#) (T732)
[-General Test Request](#) (T239)

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

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
89079	AGNA-1, CSF	Alphanumeric		90827-7
5906	Amphiphysin Ab, CSF	Alphanumeric		90815-2
3852	ANNA-1, CSF	Alphanumeric		44768-0
7472	ANNA-2, CSF	Alphanumeric		56959-0
21633	ANNA-3, CSF	Alphanumeric		90836-8
21650	CRMP-5-IgG, CSF	Alphanumeric		63216-6

3988	PCA-1, CSF	Alphanumeric		90841-8
21632	PCA-2, CSF	Alphanumeric		90843-4
21631	PCA-Tr, CSF	Alphanumeric		90845-9
21702	GAD65 Ab Assay, CSF	Numeric	nmol/L	94359-7
61513	NMDA-R Ab CBA, CSF	Alphanumeric		93502-3
61514	AMPA-R Ab CBA, CSF	Alphanumeric		93491-9
61515	GABA-B-R Ab CBA, CSF	Alphanumeric		93426-5
34256	Encephalopathy, Interpretation, CSF	Alphanumeric		69048-7
618895	IFA Notes	Alphanumeric		48767-8
64280	LGI1-IgG CBA, CSF	Alphanumeric		94288-8
64282	CASPR2-IgG CBA, CSF	Alphanumeric		94286-2
64929	DPPX Ab IFA, CSF	Alphanumeric		82989-5
64927	mGluR1 Ab IFA, CSF	Alphanumeric		94361-3
605156	GFAP IFA, CSF	Alphanumeric		94360-5
606965	NIF IFA, CSF	Alphanumeric		96490-8
606947	IgLON5 IFA, CSF	Alphanumeric		96479-1
615866	Neurochondrin IFA, CSF	Alphanumeric		101451-3
615874	Septin-7 IFA, CSF	Alphanumeric		101464-6

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
AEECI	Encephalopathy, Interpretation, CSF			Yes	No
AMPCC	AMPA-R Ab CBA, CSF	1	86255	Yes	No
AMPHC	Amphiphysin Ab, CSF	1	86255	Yes	No
AGN1C	Anti-Glial Nuclear Ab, Type 1	1	86255	Yes	No
ANN1C	Anti-Neuronal Nuclear Ab, Type 1	1	86255	Yes	No
ANN2C	Anti-Neuronal Nuclear Ab, Type 2	1	86255	Yes	No
ANN3C	Anti-Neuronal Nuclear Ab, Type 3	1	86255	Yes	No
CS2CC	CASPR2-IgG CBA, CSF	1	86255	Yes	No
CRMC	CRMP-5-IgG, CSF	1	86255	Yes	No
DPPIC	DPPX Ab IFA, CSF	1	86255	Yes	No
GABCC	GABA-B-R Ab CBA, CSF	1	86255	Yes	No
GD65C	GAD65 Ab Assay, CSF	1	86341	Yes	Yes
GFAIC	GFAP IFA, CSF	1	86255	Yes	No
IG5IC	IgLON5 IFA, CSF	1	86255	Yes	No
LG1CC	LGI1-IgG CBA, CSF	1	86255	Yes	No

GL1IC	mGluR1 Ab IFA, CSF	1	86255	Yes	No
NCDIC	Neurochondrin IFA, CSF	1	86255	Yes	No
NIFIC	NIF IFA, CSF	1	86255	Yes	No
NMDCC	NMDA-R Ab CBA, CSF	1	86255	Yes	No
PCTRC	Purkinje Cell Cytoplasmic Ab Type Tr	1	86255	Yes	No
PCA1C	Purkinje Cell Cytoplasmic Ab Type 1	1	86255	Yes	No
PCA2C	Purkinje Cell Cytoplasmic Ab Type 2	1	86255	Yes	No
SP7IC	Septin-7 IFA, CSF	1	86255	Yes	No

CPT Code Information:

- 86255 x21
- 86341 x1
- 84182 AGNBC (if appropriate)
- 86256 AGNTC (if appropriate)
- 86255 AINCC (if appropriate)
- 86256 AMPIC (if appropriate)
- 84182 AMIBC (if appropriate)
- 84182 AN1BC (if appropriate)
- 86256 AN1TC (if appropriate)
- 84182 AN2BC (if appropriate)
- 86256 AN2TC (if appropriate)
- 86256 AN3TC (if appropriate)
- 86256 APHTC (if appropriate)
- 86256 CRMTC (if appropriate)
- 84182 CRMWC (if appropriate)
- 86255 DPPCC (if appropriate)
- 86256 DPPTC (if appropriate)
- 86256 GABIC (if appropriate)
- 86255 GFACC (if appropriate)
- 86256 GFATC (if appropriate)
- 86255 IG5CC (if appropriate)
- 86256 IG5TC (if appropriate)
- 86255 GL1CC (if appropriate)
- 86256 GL1TC (if appropriate)
- 86255 NCDCC (if appropriate)
- 86256 NCDTC (if appropriate)
- 86255 NFHCC (if appropriate)
- 86256 NIFTC (if appropriate)
- 86255 NFLCC (if appropriate)
- 86256 NMDIC (if appropriate)
- 84182 PC1BC (if appropriate)
- 86256 PC1TC (if appropriate)
- 86256 PC2TC (if appropriate)

84182 PCTBC (if appropriate)
86256 PCTTC (if appropriate)
86255 SP7CC (if appropriate)
86256 SP7TC (if appropriate)

Reflex Tests:

Test Id	Reporting Name	CPT Units	CPT Code	Always Performed	Available Separately
AGNBC	AGNA-1 Immunoblot, CSF	1	84182	No	No
AINCC	Alpha Internexin CBA, CSF	1	86255	No	No
AMPIC	AMPA-R Ab IF Titer Assay, CSF	1	86256	No	No
AMIBC	Amphiphysin Immunoblot, CSF	1	84182	No	No
AN1BC	ANNA-1 Immunoblot, CSF	1	84182	No	No
AN2BC	ANNA-2 Immunoblot, CSF	1	84182	No	No
CRMWC	CRMP-5-IgG Western Blot, CSF	1	84182	No	Yes
DPPCC	DPPX Ab CBA, CSF	1	86255	No	No
DPPTC	DPPX Ab IFA Titer, CSF	1	86256	No	No
GABIC	GABA-B-R Ab IF Titer Assay, CSF	1	86256	No	No
GFACC	GFAP CBA, CSF	1	86255	No	No
GFATC	GFAP IFA Titer, CSF	1	86256	No	No
IG5CC	IgLON5 CBA, CSF	1	86255	No	No
IG5TC	IgLON5 IFA Titer, CSF	1	86256	No	No
GL1CC	mGluR1 Ab CBA, CSF	1	86255	No	No
GL1TC	mGluR1 Ab IFA Titer, CSF	1	86256	No	No
NFHCC	NIF Heavy Chain CBA, CSF	1	86255	No	No
NIFTC	NIF IFA Titer, CSF	1	86256	No	No
NFLCC	NIF Light Chain CBA, CSF	1	86255	No	No
NMDIC	NMDA-R Ab IF Titer Assay, CSF	1	86256	No	No
PC1BC	PCA-1 Immunoblot, CSF	1	84182	No	No
PCTBC	PCA-Tr Immunoblot, CSF	1	84182	No	No
AGNTC	AGNA-1 Titer, CSF	1	86256	No	No
AN1TC	ANNA-1 Titer, CSF	1	86256	No	No
AN2TC	ANNA-2 Titer, CSF	1	86256	No	No
AN3TC	ANNA-3 Titer, CSF	1	86256	No	No
APHTC	Amphiphysin Ab Titer, CSF	1	86256	No	No
CRMTC	CRMP-5-IgG Titer, CSF	1	86256	No	No
NCDCC	Neurochondrin CBA, CSF	1	86255	No	No
NCDTC	Neurochondrin IFA Titer, CSF	1	86256	No	No
PC1TC	PCA-1 Titer, CSF	1	86256	No	No
PC2TC	PCA-2 Titer, CSF	1	86256	No	No
PCTTC	PCA-Tr Titer, CSF	1	86256	No	No
SP7CC	Septin-7 CBA, CSF	1	86255	No	No
SP7TC	Septin-7 IFA Titer, CSF	1	86256	No	No

Result Codes for Reflex Tests:

Test ID	Result ID	Reporting Name	Type	Unit	LOINC®
CRMWC	21747	CRMP-5-IgG Western Blot, CSF	Alphanumeric		53707-6
NMDIC	61523	NMDA-R Ab IF Titer Assay, CSF	Alphanumeric	titer	In Process
GABIC	61525	GABA-B-R Ab IF Titer Assay, CSF	Alphanumeric	titer	93425-7
AMPIC	61524	AMPA-R Ab IF Titer Assay, CSF	Alphanumeric	titer	93492-7
DPPTC	64991	DPPX Ab IFA Titer, CSF	Alphanumeric	titer	94284-7
DPPCC	64934	DPPX Ab CBA, CSF	Alphanumeric		94283-9
GL1CC	64931	mGluR1 Ab CBA, CSF	Alphanumeric		93500-7
GL1TC	64989	mGluR1 Ab IFA Titer, CSF	Alphanumeric	titer	93501-5
GFATC	605134	GFAP IFA Titer, CSF	Alphanumeric	titer	93421-6
GFACC	605154	GFAP CBA, CSF	Alphanumeric		93422-4
AGNBC	607271	AGNA-1 Immunoblot, CSF	Alphanumeric		94383-7
AN1BC	607261	ANNA-1 Immunoblot, CSF	Alphanumeric		94390-2
AN2BC	607263	ANNA-2 Immunoblot, CSF	Alphanumeric		94388-6
PC1BC	607265	PCA-1 Immunoblot, CSF	Alphanumeric		94272-2
PCTBC	607267	PCA-Tr Immunoblot, CSF	Alphanumeric		94386-0
AMIBC	607269	Amphiphysin Immunoblot, CSF	Alphanumeric		94384-5
NFLCC	606971	NIF Light Chain CBA, CSF	Alphanumeric		96489-0
NFHCC	606969	NIF Heavy Chain CBA, CSF	Alphanumeric		96488-2
AINCC	606967	Alpha Internexin CBA, CSF	Alphanumeric		96482-5
IG5CC	606951	IgLON5 CBA, CSF	Alphanumeric		96481-7
IG5TC	606949	IgLON5 IFA Titer, CSF	Alphanumeric	titer	96480-9
NIFTC	607772	NIF IFA Titer, CSF	Alphanumeric	titer	96491-6
AGNTC	43443	AGNA-1 Titer, CSF	Alphanumeric	titer	94355-5
AN1TC	43440	ANNA-1 Titer, CSF	Alphanumeric	titer	94356-3
CRMTC	43445	CRMP-5-IgG Titer, CSF	Alphanumeric	titer	94706-9
SP7TC	616116	Septin-7 IFA Titer, CSF	Alphanumeric	titer	101457-0
NCDTC	616112	Neurochondrin IFA Titer, CSF	Alphanumeric	titer	101453-9
APHTC	618164	Amphiphysin Ab Titer, CSF	Alphanumeric	titer	94354-8
PC1TC	43446	PCA-1 Titer, CSF	Alphanumeric	titer	94363-9
AN2TC	43441	ANNA-2 Titer, CSF	Alphanumeric	titer	94357-1
PCTTC	43448	PCA-Tr Titer, CSF	Alphanumeric	titer	94362-1
AN3TC	43442	ANNA-3 Titer, CSF	Alphanumeric	titer	94358-9
PC2TC	43447	PCA-2 Titer, CSF	Alphanumeric	titer	94364-7
SP7CC	615872	Septin-7 CBA, CSF	Alphanumeric		In Process
NCDCC	615864	Neurochondrin CBA, CSF	Alphanumeric		101449-7

Reference Values:

Test ID	Reporting name	Methodology	Reference value
AEECI	Encephalopathy, Interpretation, CSF	Medical interpretation	NA
AMPCC	AMPA-R Ab CBA, CSF	CBA	Negative
AMPHC	Amphiphysin Ab, CSF	IFA	Negative
AGN1C	Anti-Glial Nuclear Ab, Type 1	IFA	Negative
ANN1C	Anti-Neuronal Nuclear Ab, Type 1	IFA	Negative
ANN2C	Anti-Neuronal Nuclear Ab, Type 2	IFA	Negative
ANN3C	Anti-Neuronal Nuclear Ab, Type 3	IFA	Negative
CS2CC	CASPR2-IgG CBA, CSF	CBA	Negative
CRMC	CRMP-5-IgG, CSF	IFA	Negative
DPPIC	DPPX Ab IFA, CSF	IFA	Negative
GABCC	GABA-B-R Ab CBA, CSF	CBA	Negative
GD65C	GAD65 Ab Assay, CSF	RIA	< or =0.02 nmol/L Reference values apply to all ages.
GFAIC	GFAP IFA, CSF	IFA	Negative
IG5IC	IgLON5 IFA, CSF	IFA	Negative
LG1CC	LGI1-IgG CBA, CSF	CBA	Negative
NCDIC	Neurochondrin IFA, CSF	IFA	Negative
GL1IC	mGluR1 Ab IFA, CSF	IFA	Negative
NIFIC	NIF IFA, CSF	IFA	Negative
NMDCC	NMDA-R Ab CBA, CSF	CBA	Negative
PCTRC	Purkinje Cell Cytoplasmic Ab Type Tr	IFA	Negative
PCA1C	Purkinje Cell Cytoplasmic Ab Type 1	IFA	Negative
PCA2C	Purkinje Cell Cytoplasmic Ab Type 2	IFA	Negative
SP7IC	Septin-7 IFA, CSF	IFA	Negative

Reflex Information:

Test ID	Reporting name	Methodology	Reference value
AGNBC	AGNA-1 Immunoblot, CSF	IB	Negative
AGNTC	AGNA-1 Titer, CSF	IFA	<1:2
AINCC	Alpha Internexin CBA, CSF	CBA	Negative
AMPIC	AMPA-R Ab IF Titer Assay, CSF	IFA	<1:2
AMIBC	Amphiphysin Immunoblot, CSF	IB	Negative
AN1BC	ANNA-1 Immunoblot, CSF	IB	Negative
AN1TC	ANNA-1 Titer, CSF	IFA	<1:2
AN2BC	ANNA-2 Immunoblot, CSF	IB	Negative
AN2TC	ANNA-2 Titer, CSF	IFA	<1:2
AN3TC	ANNA-3 Titer, CSF	IFA	<1:2
APHTC	Amphiphysin Ab Titer, CSF	IFA	<1:2
CRMTC	CRMP-5-IgG Titer, CSF	IFA	<1:2
CRMWC	CRMP-5-IgG Western Blot, CSF	WB	Negative

DPPCC	DPPX Ab CBA, CSF	CBA	Negative
DPPTC	DPPX Ab IFA Titer, CSF	IFA	<1:2
GABIC	GABA-B-R Ab IF Titer Assay, CSF	IFA	<1:2
GFACC	GFAP CBA, CSF	CBA	Negative
GFATC	GFAP IFA Titer, CSF	IFA	<1:2
IG5CC	IgLON5 CBA, CSF	CBA	Negative
IG5TC	IgLON5 IFA Titer, CSF	IFA	<1:2
GL1CC	mGluR1 Ab CBA, CSF	CBA	Negative
GL1TC	mGluR1 Ab IFA Titer, CSF	IFA	<1:2
NCDCC	Neurochondrin CBA, CSF	CBA	Negative
NCDTC	Neurochondrin IFA Titer, CSF	IFA	<1:2
NFLCC	NIF Light Chain CBA, CSF	CBA	Negative
NIFTC	NIF IFA Titer, CSF	IFA	<1:2
NMDIC	NMDA-R Ab IF Titer Assay, CSF	IFA	<1:2
PC1BC	PCA-1 Immunoblot, CSF	IB	Negative
PC1TC	PCA-1 Titer, CSF	IFA	<1:2
PC2TC	PCA-2 Titer, CSF	IFA	<1:2
PCTBC	PCA-Tr Immunoblot, CSF	IB	Negative
PCTTC	PCA-Tr Titer, CSF	IFA	<1:2
SP7CC	Septin-7 CBA, CSF	CBA	Negative
SP7IC	Septin-7 IFA Titer, CSF	IFA	<1:2

*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, CRMP-5-IgG, PCA-1, 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 1:2 are detectable by recombinant CRMP-5 Western blot analysis. CRMP-5 Western blot analysis will be done on request on stored spinal fluid (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.