MAYO CLINIC LABORATORIES

1-800-533-1710

Patient ID	Patient Name		Birth Date	Sex	Age
321	IMPLEMENTATION, TEST T		1973-05-01	F	52
Order Number	**Client Order Number**	**Ordering Physician**	**Report Notes**		
X100500684	X100500684	123			
Account Information		**Collected**			
C7028846 DLMP Rochester		03 Jun 2025 07:30			

KLHL11 Ab IFA Titer, CSF

Result Name	Result	Unit	Reference Value	Performing Site
High **KLHL11 Ab IFA Titer, CSF**	**Positive 1:8**	titer	<1:2	1 MCR

This profile supports a diagnosis of neurological autoimmunity. Considerations include brainstem encephalitis, cerebellar ataxia, encephalopathy and epilepsy. A paraneoplastic basis should be considered. Considerations include testicular germ cell tumors, especially seminoma.

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Movement, Autoimm/Paraneo, CSF

Movement Disorder Interp, CSF

MCR

The following antibody was identified: Kelch-like Protein 11 (KLHL11).

- This profile supports a diagnosis of neurological autoimmunity. Considerations include brainstem encephalitis, cerebellar ataxia, encephalopathy and epilepsy. A paraneoplastic basis should be considered. Considerations include testicular germ cell tumors, especially seminoma.
- Expanded Clinical Phenotype, Oncological Associations, and Immunopathologic Insights of Paraneoplastic Kelch-like Protein-11 Encephalitis. Dubey D, Wilson MR, Clarkson B, Giannini C, Gandhi M, Cheville J, Lennon VA, Eggers S, Devine MF, Mandel-Brehm C, Kryzer T, Hinson SR, Khazaie K, Hales C, Kattah J, Pavelko KD, Andrews P, Eaton JE, Jitprapaikulsan J, Mills JR, Flanagan EP, Zekeridou A, Leibovich B, Fryer J, Torre M, Kaufman C, Thoreson JB, Sagen J, Linnoila JJ, DeRisi JL, Howe CL, McKeon A, Pittock SJ.JAMA Neurol. 2020 Nov 1;77(11):1420–1429. doi: 10.1001/jamaneurol.2020.2231.PMID: 32744608
- Kelch-like Protein 11 Antibodies in Seminoma-Associated Paraneoplastic Encephalitis. Mandel-Brehm C, Dubey D, Kryzer TJ, O'Donovan BD, Tran B, Vazquez SE, Sample HA, Zorn KC, Khan LM, Bledsoe IO, McKeon A, Pleasure SJ, Lennon VA, DeRisi JL, Wilson MR, Pittock SJ.N Engl J Med. 2019 Jul 4;381(1):47–54. doi: 10.1056/NEJMoa1816721.PMID: 31269365
- Mayo Clinic has extensive experience in evaluating patients with the above autoimmune neurological diagnosis. If you would like your patient to be evaluated in our comprehensive Autoimmune Neurology Clinic, please contact our service at 507–284–3374.

IFA Notes

MCR

None.

Test Environment
EIA Template

Performing Site Legend

Code	Laboratory	Address	Lab Director	CLIA Certificate
MCR	Mayo Clinic Laboratories - Rochester Main Campus	200 First Street SW, Rochester, MN 55905	Nikola Baumann Ph.D.	24D0404292

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Result Name	Result	Unit	Reference Value	Performing Site
⚠ Abn **KLHL11-IgG CBA, CSF**	**Reactive**		Negative	1 MCR
Tissue based immunofluorescence confirmation to follow. A reactive screen means that the screening method is positive, but the test needs to be run by a confirmatory method before being finalized.				
AMPA-R Ab CBA, CSF	Negative		Negative	1 MCR
Amphiphysin Ab, CSF	Negative		Negative	1 MCR
AGNA-1, CSF	Negative		Negative	1 MCR
ANNA-1, CSF	Negative		Negative	1 MCR
ANNA-2, CSF	Negative		Negative	1 MCR
ANNA-3, CSF	Negative		Negative	1 MCR
AP3B2 IFA, CSF	Negative		Negative	1 MCR
CASPR2-IgG CBA, CSF	Negative		Negative	1 MCR
CRMP-5-IgG Western Blot, CSF	Negative		Negative	1 MCR
DPPX Ab CBA, CSF	Negative		Negative	1 MCR
GABA-B-R Ab CBA, CSF	Negative		Negative	1 MCR
GAD65 Ab Assay, CSF	0.00	nmol/L	≤ 0.02	1 MCR
GFAP IFA, CSF	Negative		Negative	1 MCR
GRAF1 IFA, CSF	Negative		Negative	1 MCR
IgLON5 CBA, CSF	Negative		Negative	1 MCR
ITPR1 IFA, CSF	Negative		Negative	1 MCR
LGI1-IgG CBA, CSF	Negative		Negative	1 MCR
mGluR1 Ab IFA, CSF	Negative		Negative	1 MCR
Neurochondrin IFA, CSF	Negative		Negative	1 MCR
NIF IFA, CSF	Negative		Negative	1 MCR
NMDA-R Ab CBA, CSF	Negative		Negative	1 MCR
PCA-Tr, CSF	Negative		Negative	1 MCR
PCA-1, CSF	Negative		Negative	1 MCR
PCA-2, CSF	Negative		Negative	1 MCR
PDE10A Ab IFA, CSF	Negative		Negative	1 MCR
Septin-5 IFA, CSF	Negative		Negative	1 MCR
Septin-7 IFA, CSF	Negative		Negative	1 MCR
TRIM46 Ab IFA, CSF	Negative		Negative	1 MCR

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Test Environment
FDAB Template

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Account Information		**Collected**			
C7028846 DLMP Rochester		03 Jun 2025 07:30			

Test Environment
ETAB Template

Laboratory Notes

[1] This test was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

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