

ANA and ANCA Testing

The Immunology Laboratory will start ANA and ANCA testing using **NOVA View digital IFA microscope** on 9/14/2021.

ANA

ANA screening test is intended for the qualitative and semi-quantitative detection of autoantibodies of the IgG isotype in human serum. It can be used in conjunction with other serological tests and clinical findings to aid the diagnosis of autoimmune or ANA-associated rheumatic diseases. Indirect immunofluorescence IIF using Hep-2 cells remains the “gold standard” method.

NOVA View is an indirect immunofluorescence automated digital image analysis system using digital IFA microscope and Hep-2 substrate slides, designed for analyzing and interpreting ANA results. A trained and experienced technician must confirm the results generated by NOVA View device before releasing the result. This will aid in the standardization of ANA results and provides opportunity to share the images and archive the results.

The patterns and titers reported will remain the same (homogeneous, peripheral, speckled, nucleolar) and additionally, the laboratory will report centromere, nuclear dots, PCNA and DFS-70 patterns. In case DFS pattern is detected, it is important to evaluate antibody specificity, since DFS pattern is detected in various chronic inflammatory conditions and not usually associated with rheumatic disease. Cytoplasmic pattern is being reported as ANA negative with comment on the cytoplasmic pattern. Example of an old and new EPIC result view are included below.

Validation results showed excellent agreement and no discrepancies between manually read slides (IIF) and the new instrument. When comparing methods and results, it is generally accepted that agreement is considered within +/- 1 doubling dilution, but this can potentially produce discrepant results in low positive/negative samples.

Code for the test EPIC order remains the same (LAB147). ANA can be ordered as an individual test or as a part of the Arthritis Panel order set.

ANCA

NOVA View is a digital Immunofluorescence microscope that together with NOVA Lite Ethanol and Formalin slides form an **indirect immunofluorescence assay** for the qualitative and semi-quantitative detection of anti-neutrophil antibodies. The presence of ANCA, together with other laboratory and clinical data aids in the diagnosis of ANCA associated vasculitides. A trained and experienced technician must confirm results generated by NOVA View device. This will aid in the standardization of ANCA results and provides opportunity to share the images and archive the results.

ANCA testing algorithm will remain the same as with the manual method. ANA will also be performed to check for ANA interference. It will be performed at 1:20 dilution, the same dilution as formalin and ethanol slides (previously performed at 1:80). Example of an old and new EPIC result view are included below.

Validation results showed excellent agreement between manually read slides and the new instrument. When comparing methods and results, it is generally accepted that agreement is considered within +/- 1 doubling dilution, but this can potentially produce discrepant results in low positive/negative samples.

Code for the test (Neutrophil Cytoplasmic Antibody) in EPIC order remains the same (LAB2519).

If there are any test result discrepancies that would need additional scrutiny or testing, please do not hesitate and contact the Immunology Laboratory at 464-6764.

EPIC result views

ANA Now

UPSTATE
University Health System

Specimen Information

Type: Serum

Collected:

Resulting Agency: SUNY UPSTATE CLINICAL PATHOLOGY

! ANA Order.

Collected: 7/29/2021 11:15 Status: Final result Visible to patient

0 Result Notes

	Ref Range & Units	7/29/21 1115
Homogeneous Pattern	<80 /(dilution)	<80
Speckled Pattern	<80 1/dil	320 ^
Peripheral Pattern	<80 1/dil	<80
ANA,Nucleolar pattern	<80 /(dilution)	<80

Resulting Agency: SUNY Upstate Med Univ Clin Pathology

Specimen Collected: Last Resulted: 07/30/21 15:00

[Lab Flowsheet](#) [Order Details](#) [View Encounter](#) [Lab and Collection Details](#) [Result History](#)

ANA After change

LAB147 ANA Antinuclear Antibody will report ANA Interpretation and up to 3 ANA Titers and Patterns.

! ANA Antinuclear Antibody

Collected: 8/3/2021 07:00 Status: Final result Visible to patient: No (scheduled for 8/3/2021 7:00 PM)

0 Result Notes

	Ref Range & Units	8/3/21 0700
ANA Interpretation	Negative	Positive !
ANA Titer 1		1:80
ANA Titer 1 Pattern		Speckled
ANA Titer 2		1:160
ANA Titer 2 Pattern		Centromere
ANA Titer 3		1:320
ANA Titer 3 Pattern		Nuclear Dots Noted

Resulting Agency: SUNY Upstate Med Univ Clin Pathology

Specimen Collected: 08/03/21 07:00 Last Resulted: 08/03/21 12:23

EPIC result views

ANCA Now

Neutrophil Cytoplasmic Antibody
Collected: 8/3/2021 06:15 Status: Final result Visible to patient: No (scheduled for 8/3/2021 7:00 PM)

0 Result Notes

	Ref Range & Units	8/3/21 0615
ANCA Interpretation	Negative	Negative
Resulting Agency		SUNY Upstate Med Univ Clin Pathology

Specimen Collected: 08/03/21 06:15 Last Resulted: 08/03/21 12:22

ANCA After change

LAB2519 Neutrophil Cytoplasmic Antibody will report ANCA Interpretation and ANCA Titer and Pattern when interpretation is positive.

⚠ Neutrophil Cytoplasmic Antibody
Collected: 8/3/2021 03:00 Status: Final result Visible to patient: No (not released)

0 Result Notes

	Ref Range & Units	8/3/21 0300
ANCA Interpretation	Negative	Positive !
ANCA Titer 1		1:20
ANCA Titer 1 Pattern		p-ANCA pattern
Resulting Agency		SUNY Upstate Med Univ Clin Pathology

Specimen Collected: 08/03/21 03:00 Last Resulted: 08/03/21 12:23

[Lab Flowsheet](#) [Order Details](#) [View Encounter](#)