# ANA Screen, IFA, Reflex Titer/Pattern, and Reflex to Multiplex 11 Ab Cascade

**CPT Code:** 86038 **Order Code:** 16814

**Includes:** The ANA Screen, IFA, Reflex Titer/Pattern, and Reflex to Multiplex 11 Ab Cascade begins with an ANA Screen, IFA. If ANA Screen, IFA is positive, then ANA Titer and Pattern will be performed at an additional charge (CPT code(s): 86039). Additionally, five antibodies will be performed at an additional charge: dsDNA (CPT code(s): 86225), Sm/RNP (CPT code(s): 86235), RNP (CPT code(s): 86235), Sm (CPT code(s): 86235), and Chromatin (CPT code(s): 86235).

If any of those five antibodies are positive, the cascade stops and the results are reported. If all five of those antibodies are negative, four additional antibodies will be performed at an additional charge: SSA (CPT code(s): 86235), SSB (CPT code(s): 86235), Scl-70 (CPT code(s): 86235), Jo-1 (CPT code(s): 86235).

If any of those four antibodies are positive, the cascade stops and the results are reported. If all four of those antibodies are negative, the following two additional antibodies will be performed at an additional charge: Ribosomal P (CPT code(s): 83516) and Centromere B (CPT code(s): 86235).

Please note the cascade stops upon the first positive antibody result(s) found in a group and an interpretive message is applied based on this information. It is possible that antibodies in subsequent groups are also positive, but will not be added, billed, or reported. Please contact your local Quest Diagnostics Laboratory if you are interested in adding this additional testing.

**Alternative Names:** Systemic Lupus Erythematosus (SLE), Fluorescent ANA, Dermatomyositis, Hep-2, MCTD, Calcinosis, Mixed Connective Tissue Disease, FANA, Progressive ANA, Sclerodactyly, CREST, Telangiectasia, Raynaud's phenomena, Multiplex Cascade, Esophageal dysmotility, Antinuclear Antibody Screen

ABN Requirement: No

**Specimen**: Serum

Preferred Volume: 1.0 mL

Minimum Volume: 0.2 mL

**Container:** Gel-barrier tube (SST, Tiger Top)

## **Collection**:

1. Collect and label sample according to standard protocols.

2. Gently invert tube 5 times immediately after draw. DO NOT SHAKE.

3. Allow blood to clot 30 minutes.

4. Centrifuge for 10 minutes.

**Transport:** Store serum at 2°C to 8°C after collection and ship the same day per packaging instructions included with the provided shipping box.

# **Stability:**

**Ambient (15-25°C):** 4 days

**Refrigerated (2-8°C):** 7 days **Frozen (-20°C):** 30 days

Causes for Rejection: Gross hemolysis; gross lipemia; gross icterus; microbial

contamination

**Methodology**: Immunofluorescence Assay

**Turn Around Time:** 3 to 4 days

# Reference Range:

ANA Screen	Negative
ANA Titer	
<1:40	Negative
1:40-1:80	Low antibody level
>1:80	Elevated antibody level

Clinical Significance: This test can be helpful in the diagnosis of autoimmune rheumatic diseases. Specimens with positive results for antinuclear antibodies (ANAs) on the immunofluorescence assay (IFA), performed on human epithelial type 2 (HEp-2) cells, are subsequently tested for a series of disease-specific autoantibodies in cascade tiers. The first tier focuses on autoantibodies associated with systemic lupus erythematosus (SLE) and mixed connective tissue disease;

the second tier detects autoantibodies seen in Sjogren Syndrome, progressive systemic sclerosis, and polymyositis; and the third tier includes markers of the limited form of systemic sclerosis and neuropsychiatric SLE.

ANA IFA on HEp-2 cells is considered by the American College of Rheumatology as the current gold standard for ANA screening because of its overall high sensitivity for several autoimmune diseases [1]. Knowing the titer and fluorescent staining pattern can be helpful in interpreting positive results. Because ANAs can be present in many other diseases as well as in individuals without autoimmune disease, testing for specific autoantibodies may offer greater specificity and help support the diagnosis.

Individuals with negative results on the ANA IFA usually also have negative results on most of the clinically important specific autoantibodies. Therefore, additional testing by immunoassay is not recommended for individuals without positive ANA IFA results and clinical suspicion of relevant autoimmune disease. However, Jo-1 antibody may be detected in ANA IFA-negative patients with some types of myositis, and SSA antibody may be detected in some ANA IFA-negative patients with lupus or Sjogren syndrome [2].

Note that the cascade stops with the first tier in which a positive antibody result is observed. Therefore, even if an antibody included in a subsequent tier is present, it will not be reported with this test. If the ANA IFA result is positive but all the specific autoantibodies tested in the cascade are negative, the patient may still have an autoimmune disease other than those typically associated with the antibodies tested.

The results of this test should be interpreted in the context of pertinent clinical and family history and physical examination findings.

## References

- 1. Methodology of testing for antinuclear antibodies (position statement). 2009. American College of Rheumatology. Updated December 2019. Accessed March 15, 2022. Methodology of Testing Antinuclear Antibodies Position Statement (PDF)
- 2. Yazdany J, et al. Arthritis Care Res (Hoboken). 2013;65(3):329-339.

The CPT codes provided are based on AMA guidelines and are for informational

purposes only. CPT coding is the sole responsibility of the billing party. Please direct any questions regarding coding to the payer being billed.