

**Patient Name :** Demo Patient Name  
**Age / Sex :** 62 Y / F  
**Referred By :** DEMO HOSPITAL  
**Centre :** HOD Head Office

**Lab No :** Demo Visit No  
**Registration On :** 21-Jan-25 16:29  
**Patient ID :** UHID.DEMO.001

## ENA Profile

Serum Sample

**Accession No:** DEMO\_BARCODE **Collected On:** 21-Jan-25 16:29 **Received On:** 21-Jan-25 20:29 **Approved On:** 22-Jan-25 16:30

| Observation                               | Result   | Unit | Biological Ref. Interval | Method |
|-------------------------------------------|----------|------|--------------------------|--------|
| nRNP / Sm                                 | Negative |      |                          | LIA    |
| Sm (Anti Smith Antibodies)                | Negative |      |                          | LIA    |
| SS-A / Anti Ro (60 kD)                    | Negative |      |                          | LIA    |
| SS-A / Anti Ro (52 kD)                    | Negative |      |                          | LIA    |
| SS-B (Anti LA)                            | Negative |      |                          | LIA    |
| SCL-70 (Scleroderma 70)                   | Negative |      |                          | LIA    |
| PM Scl (Polymyositis/Scleroderma)         | Negative |      |                          | LIA    |
| Anti Jo-1 Antibody                        | Negative |      |                          | LIA    |
| CENP-B (Centromere Pattern-B)             | Negative |      |                          | LIA    |
| PCNA (Proliferating Cell Nuclear Antigen) | Negative |      |                          | LIA    |
| DsDNA                                     | Negative |      |                          | LIA    |
| Nucleosome                                | Negative |      |                          | LIA    |
| Histone                                   | Negative |      |                          | LIA    |
| PO (Rib-PO)                               | Negative |      |                          | LIA    |
| AMA-M2                                    | Negative |      |                          | LIA    |

**Clinical Application and Principle of the Test:** Anti-nuclear antibodies (ANAs) are an important tool for the differential diagnosis of systemic rheumatic diseases. The detection of autoantibodies in the Line Immuno Assay (LIA) with corresponding specific antigens allows a simple and reliable differentiation of ANAs by their specificity. ANAs are especially found in active and inactive systemic lupus erythematosus (SLE), mixed connective tissue diseases (MCTDs), scleroderma, Sjögren's syndrome, primary biliary cirrhosis (PBC) and polymyositis. Antibodies against:

- Nucleosomes** are directed against epitopes of the histone complex (nucleosome). In addition, anti-dsDNA and anti-histone antibodies can recognize epitopes of the nucleosome. In comparison to anti-dsDNA antibodies, anti-nucleosome antibodies are more sensitive and can provide a useful addition to the diagnosis of SLE (Chabre et al. 1995; Bruns et al. 2000). Furthermore, they have pathogenetic significance in lupus nephritis (Van Bruggen et al. 1996; Amoura et al. 1999).
- dsDNA** are regarded as being specific for SLE and have been observed in approximately 50-80 % of the patients.
- Histones** are common in SLE patients but can also occur in other connective tissue diseases. Antibodies to histones in the absence of other autoantibodies (especially anti-dsDNA) are a characteristic marker for drug-induced lupus erythematosus (Rubin 1999).
- Sm:** Anti-Smith-antibodies as well as antibodies against double stranded DNA (dsDNA) are highly specific for SLE and thus are included in diagnostic and classification criteria for SLE.
- U1-snRNP** are pathognomonic for MCTD but also occur in SLE. A high titre of antibodies against this antigen is typical for sharp's syndrome.
- SS-A (Ro);** soluble cytoplasmic and/or nuclear ribonucleoproteins of **52 kDa** and **60 kDa** and antibodies against **SS-B (La; 48 kDa)** protein associated with RNA-polymerase III are mainly found in high titers for primary and secondary Sjögren's syndrome but also in SLE, congenital heart block and neonatal lupus.
- Scl-70** are directed against DNA-topoisomerase I. They are highly specific for systemic scleroderma and are indicative of a severe course of the disease.
- CENP-B** (80 kDa centromere protein B) are typical for the CREST-syndrome (69 % of CREST patients), which is a more protracted type of systemic sclerosis.
- Jo-1** are directed against histidyl-tRNA-synthetase (a cytoplasmic protein involved in protein biosynthesis) and are found in 20-40 % of patients with polymyositis and dermatomyositis.
- ribosomal P**-proteins are directed against several phosphoproteins of the large ribosomal subunit. They occur in patients with systemic lupus erythematosus (Elkon et al. 1985) and in lupus patients with cerebral involvement (Bonfa et al. 1987).
- AMA M2** react with the proteins of the ketoacid-dehydrogenase complex of mitochondria. They occur in 95 % of PBC patients in high titers. Their evidence is crucial for the diagnosis of PBC and for separation from other cholestatic liver diseases.
- Pm-Scl** are found in 24 % of Pm-Scl overlap-syndrome patients and in 3-10 % of scleroderma and polymyositis patients.
- PCNA** are specific for SLE. The antigen is a protein with a molecular weight of 36 kDa, which is an auxiliary protein of DNA polymerase delta. It supports DNA synthesis and DNA repair mechanisms.

**Advise:** Please correlate reports clinically.



This is a Demo Signature  
and the doctor's signature should appear here

In case of any unexpected or alarming results, please contact us immediately for re-confirmation, clarifications, and rectifications, if needed.



This is a Sample Report - Actual report will vary in values, format, ranges etc

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Sample Report



There may be an additional PDF attachment in this report which has been redacted for privacy.  
Please contact [info@hod.care](mailto:info@hod.care), if you would like to make a booking for this test.