

Autoimmune

Thermo Scientific Expanded ENA Screen and Discrete Well Testing

Fully automated EliA™ Extractable Nuclear Antigen (ENA) assays can be used in conjunction with other laboratory and clinical findings to aid in the diagnosis of connective tissue diseases (CTD).

Independently, or in conjunction with ANA IFA, EliA CTD assays offer numerous advantages.



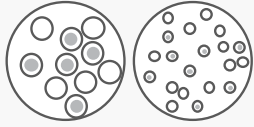
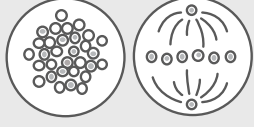

Balanced sensitivity and specificity for the most clinically relevant markers allows customers to provide results with confidence. The ability to run Phadia™ Laboratory Systems with automated reflex allows for efficient testing capabilities.

Consistency and reproducibility of results limits the factors that affect ANA IFA results and lead to inter and intra-laboratory differences.

These factors include:¹

- Cell type
- Fixation procedure
- Dilution of patient serum
- Inspection time
- Day-to-day performance
- Experience level of the microscopist
- Microscope variation

Understanding the complexity of IFA⁶

Antigen		ANA Pattern
RNP, Sm, SSA/Ro		Peripheral (rim) 
dsDNA Histones		Homogenous (diffuse) 
Sm RNP SSA/Ro, SSB/La	Jo-1 Scl-70 Ribosomal-P	Speckled 
CENP (A-E)		Centromere 
RNP RNA Pol I-III PM-Scl		Nucleolar 

Superior reliability for the detection of dsDNA, Ro (SS-A), and Jo-1 activity compared to ANA IFA.^{1,2} These autoantibodies have high prevalence in certain CTDs (see chart below) and are included in classification criteria.³⁻⁵

See our EliA test menu for complete offering.

Broad menu crafted for deep insights

A broad menu of clinically relevant markers provides efficient diagnostic pathways. The EliA autoimmunity solutions menu is flexible, enabling labs to offer the appropriate level of differentiation for all the clinicians they serve.

First Line Testing



Second Line Differentiation



Additional Differentiation



ENA prevalence within individual Connective Tissue Diseases⁷⁻¹⁷

Antigen	Systemic Lupus Erythematosus	Sjögren's Syndrome	Systemic Sclerosis	Idiopathic Inflammatory Myopathies	Mixed Connective Tissue Disease
dsDNA					
Sm					
SS-A/Ro (60k Da, 52 kDa)					
SS-B/La					
U1RNP (70, A, C)					
Scl-70					
Jo-1					
CENP					
RNP-70					
Ro60*					
Ro52*					
Rib-P					
RNA Pol III					

*Isolated

Prevalence percentage key:

up to 30%

up to 65%

up to 100%

Learn more at thermofisher.com/CTD

1. Baroneite R, et al. Autoimmune Diseases 2014; <http://dx.doi.org/10.1155/2014/534759>. 2. Bossut X and Luyckx A. Clin Chem 2005; 51: 2426-2427. 3. Aringer M, Costenbader K, Daikh D, et al. 2019 European League Against Rheumatism/American College of Rheumatology Classification Criteria for Systemic Lupus Erythematosus. Arthritis Rheumatol. 2019;71(9):1400-1412. doi:10.1002/art.40930. 4. Shiboski, C.H., et al (2017). 2016 American College of Rheumatology/European League Against Rheumatism Classification Criteria for Primary Sjögren's Syndrome: A Consensus and Data-Driven Methodology Involving Three International Patient Cohorts. Arthritis Rheumatol 69(1):35-45. 5. Böttai, M., et al. (2017). EULAR/ACR classification criteria for adult and juvenile idiopathic inflammatory myopathies and their major subgroups: a methodology report. RMD Open 3 (2): e000507. 6. Kumar Y, Bhatia A, Mirz RW. Antinuclear antibodies and their detection methods in diagnosis of connective tissue diseases: a journey revisited. Diagn Pathol. 2009;4:1. Published 2009 Jan 2. doi:10.1186/1746-1596-4-1. 7. Yoshimi R, Ueda A, Ozato K, Ishigatsubo Y. Clinical and pathological roles of Ro/SSA autoantibody system. Clin Dev Immunol. 2012;2012:606195. doi: 10.1155/2012/606195. Epub 2012 Dec 6. PMID: 23304190; PMCID: PMC3523155. 8. Conti F, Ceccarelli F, Perricone C, et al. Systemic Lupus Erythematosus with and without Anti-dsDNA Antibodies: Analysis from a Large Monocentric Cohort. Mediators Inflamm. 2015;2015:328078. doi:10.1155/2015/328078. 9. Peng SL and Craft JE. Autoantibodies 1996, pp 774-782. 10. Gerli L and Caponi L. Autoimmunity 2005 11. Rao L, Liu G, Li C, et al. Specificity of anti-SSB as a diagnostic marker for the classification of systemic lupus erythematosus. Exp Ther Med. 2013;5(6):1710-1714. doi:10.3892/etm.2013.1051. 12. Tan EM. Immunologist 1999 13. Nikpour M, et al. Arthritis Research & Therapy 2011 14. Martins Rocha T, Fonseca R, Rosa-Gonçalves D, et al. AB0645 Anti-SSA/Ro Antibodies in A Cohort of Systemic Sclerosis Patients: The Association with Interstitial Lung Disease Annals of the Rheumatic Diseases 2016;75:1125-1125. 15. Ihn H, et al. Clin Exp Immunol. 1996 16. Cruellas MG, Viana Vdos S, Levy-Neto M, Souza FH, Shinjo SK. Myositis-specific and myositis-associated autoantibody profiles and their clinical associations in a large series of patients with polymyositis and dermatomyositis. Clinics (Sao Paulo). 2013;68(7):909-914. doi:10.6061/clinics/2013/07/04. 17. Robbins, Ailsa et al. "Diagnostic Utility of Separate Anti-Ro60 and Anti-Ro52/TRIM21 Antibody Detection in Autoimmune Diseases." Frontiers in immunology vol. 10 444. 12 Mar. 2019. doi:10.3389/fimmu.2019.00444