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Extractable nuclear antigens

From Wikipedia, the free encyclopedia

Extractable Nuclear Antigens are soluble cytoplasmic and nuclear components that are antibody targets with over 100 different antigens described.

The main 6 used in immunological laboratories for detection are [Ro](#), [La](#), [Sm](#), [RNP](#), [Scl-70](#) and [Jo1](#),^[1] which are screened for by [Ouchterlony double immuno diffusion](#) techniques and confirmed by [Immuno blotting](#). [Autoantibodies](#) to these antigens have particular associations with various connective tissue disorders.

On [anti-nuclear antibody](#) tests, they have a speckled pattern.^[2]

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Terminology

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ENAs originally referred to proteins found in a saline extract of cell nuclei. Its components have since been more clearly identified and in fact include many cytoplasmic molecules. The misnomer however has stuck. These proteins are intimately associated with various RNA molecules and are thus called ribonucleoproteins, but the nomenclature used for them is often a source of confusion, Sm, Ro and La were named after the first 2 letters of the surnames of the patients in whom they were first found. Two proteins associated with Sjogren's Syndrome were independently described as antigens A and B, but are now known to be identical to Ro and La respectively. i.e. SS-A = Ro and SS-B = La.

ENA 4

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ENA 4 is a grouping of antibodies often used to screen for [mixed connective tissue disease](#) (MCTD), [Sjögren's syndrome](#) and [systemic lupus erythematosus](#) and commonly is composed of four tests:^[3]

- anti-Sm (for SLE)
- anti-RNP (for MCTD)
- anti-La (for Sjögren's)
- anti-Ro (for Sjögren's)

References

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- ↑ Prince HE, Hogrefe WR (1998). "Evaluation of a line immunoblot assay for detection of antibodies recognizing extractable nuclear antigens". *J. Clin. Lab. Anal.* **12** (5): 320–4. doi:10.1002/(SICI)1098-2825(1998)12:5<320::AID-JCLA13>3.0.CO;2-X . PMID 9773966 .
- ↑ "Immunopathology" .
- ↑ ENA 4 test (QUANTA Lite) product sheet. inovadx.com. URL: http://www.inovadx.com/Products/di_pdfs/708555/628555rEnglish.pdf ENA . Accessed on: November 5, 2007.

External links

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- [Extractable+Nuclear+Antigens](#)  at the US National Library of Medicine [Medical Subject Headings \(MeSH\)](#)



This *cell biology* article is a *stub*. You can help Wikipedia by *expanding it*.

 V • T • E •	Medical test: Antibodies: autoantibodies [hide]
Anti-nuclear antibody	<i>PBC</i> : (Anti-gp210 • Anti-p62 • Anti-sp100 • • <i>ENA</i> : (Anti-topoisomerase/Scl-70 • Anti-Jo1 • ENA4 (Anti-Sm • Anti-nRNP • Anti-Ro • Anti-La • • • Anti-centromere • Anti-dsDNA •
Anti-mitochondrial antibody	Anti-cardiolipin •
Anti-cytoplasm antibody	Anti-neutrophil cytoplasmic (C-ANCA • P-ANCA • • Anti-smooth muscle (Anti-actin • • Anti-TPO/Antimicrosomal •
Cell membrane	Anti-ganglioside • Anti-GBM •
Extracellular	Anti-thrombin • Lupus anticoagulant • Gluten sensitivity: (Anti-transglutaminase (Anti-gliadin not autoantibody • • • <i>RA</i> (Rheumatoid factor/anti-IgG • Anti-citrullinated peptide • •
Multiple locations	Anti-phospholipid • Anti-apolipoprotein •
Ungrouped	Anti-glutamate receptor antibodies •
M: LMC	cell/phys/auag/auab/comp, igr imdf/ipig/hyps/tumr proc, drug(L3/4)

Categories: Rheumatology | Cell biology stubs

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