

EliA™ CTD Screen

The most comprehensive EIA screen for connective tissue diseases

Clinical rationale

■ **Helps in differentiating patients with and without connective tissue diseases (CTDs) ¹**

- CTDs are difficult to diagnose because they often start with general non-specific symptoms ²

■ **High specificity is needed to reduce false positive results**

- Only antibodies against specific antigens are associated with connective tissue diseases
- Reduce unnecessary referrals, tests, and labor, in addition to preventing misdiagnosis and anxiety in patients ³

Most important marker autoantibodies in CTD ⁴

Marker autoantibodies	Associated CTD
dsDNA	SLE
Sm	SLE
Rib-P	SLE
PCNA	SLE
U1-snRNP (70 kD, A and C)	MCTD, SLE
SS-A/Ro (Ro52 and Ro60)	Sjögren's syndrome, SLE, neonatal lupus
SS-B/La	Sjögren's syndrome, SLE, neonatal lupus
Scl-70	Scleroderma
CENP	Scleroderma (CREST)
Fibrillarin	Scleroderma
RNA Polymerase III	Scleroderma
Jo-1	Polymyositis / dermatomyositis
Mi-2	Polymyositis / dermatomyositis
PM-Scl	Polymyositis-scleroderma overlap, scleroderma

„... detecting specificities of ANA such as nucleolar is clinically important“⁵



EliA™ CTD Screen: find connective tissue diseases – reduce false positives

■ Sensitive and reliable detection of clinically relevant markers

- EliA high quality antigens: human recombinant U1RNP (RNP70, A, C), SS-A/Ro (60 kDa, 52 kDa), SS-B/La, CENP B, Scl-70, Jo-1, Fibrillarin, RNA Pol III, Rib-P, PM-Scl, PCNA, Mi-2 proteins, Sm proteins and native purified DNA
- Outstanding sensitivity even for difficult-to-detect antibodies such as anti-SS-A/Ro or anti-Jo-1⁶
- First EIA Screen with the nucleolar antigens fibrillarin, RNA polymerase III and PM-Scl for a more comprehensive diagnosis of scleroderma

■ Less false positives

- High specificity due to the selection of antigens and the use of recombinant antigens
- Detection of disease-specific antibodies instead of an ANA pattern helps to avoid misinterpretation

cut-off	HEp-2		EliA™ CTD Screen
	1:80	1:160	Ratio 1.0
Sensitivity	85.0%	72.5%	70.0%
Specificity	54.9%	69.2%	90.1%
PPV	45.3%	50.9%	75.7%
NPV	89.3%	85.1%	87.2%

Routine study with consecutive samples: 40 CTD patients and 91 disease controls

„People with false-positive results are put on inappropriate therapies and physicians go down many blind alleys for expensive workups.“⁵

Automation makes it easy and economical

■ Using the proven Phadia automated laboratory systems Phadia® 100 and Phadia® 250

■ High efficiency for reduced labor costs and hands-on time

- One calibration curve per isotype stored for one month – IgG, IgA, IgM, IgE
- Onboard dilution
- Random access
- Follow up of single antibody specificities in the same instrument

■ Objective interpretation of results

References

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