

Rheumatoid Arthritis, Diagnostic Panel

To ascertain an earlier definitive diagnosis of Rheumatoid Arthritis, two tests are more conclusive than one.

The Rheumatoid Arthritis, Diagnostic Panel combines Rheumatoid Factor (RF) and Anti-Cyclic Citrullinated Peptide (Anti-CCP) to help you diagnose Rheumatoid Arthritis (RA) in patients with early, undifferentiated oligo- and polyarthritis.

Test code: 801796
RF & Anti-CCP

Specimen Requirements: 2 mL refrigerated serum

The panel helps provide a more definitive diagnosis than RF alone, with almost 100% Positive Predictive Value (PPV).

- The presence of both RF and Anti-CCP in the same patient increases the likelihood that the patient has RA to 95-99%.^{1,2}

	Anti-CCP ³	RF ³
Sensitivity%	66	72
Specificity%	90	80

RF alone is not always indicative of RA since RF is detected in many other autoimmune diseases.

Presence of Anti-CCP and RF in various rheumatic diseases and controls:

Population	Sample Size	Percent Positive*	
		Anti-CCP	RF
Rheumatoid Arthritis ²	231	74	70
SLE ⁴	201	6	13
Primary Sjögren's Syndrome ⁵	134	8	59
HCV-Related Cryoglobulinemia ⁶	29	7	76
Osteoarthritis ²	40	8	13
Healthy Donors ⁷	154	15	7

*Percentage shown is based on specific reference cited.

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The Rheumatoid Arthritis, Diagnostic Panel is used by rheumatologists to help obtain an earlier definitive diagnosis of Rheumatoid Arthritis.

RF and especially Anti-CCP can be detected years before the onset of symptoms. In studies of blood donors, sensitivity of Anti-CCP detection for future development of RA ranged from 29% to 37% with specificity of greater or equal to 98%.⁹

- When testing with RF alone, many RA cases may not be diagnosed early enough to prevent irreversible damage.
- The combination of Anti-CCP and RF provides greater sensitivity than either assay alone and is therefore useful in the diagnostic work-up of suspected RA.^{7,10}
- In patients with RA and a negative test for RF (20-30% of the RA population), a positive test for Anti-CCP provides support for a RA diagnosis in 35% of such cases.⁷

With your next case of undifferentiated arthritis, choose the Rheumatoid Arthritis, Diagnostic Panel to help obtain an earlier and more definitive diagnosis for your patient.

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3 Lee DM, Schur PH. Clinical utility of anti-CCP assay in patients with rheumatic diseases. *Ann Rheum Dis*. 2003;62:870-74.

4 Hoffman IE, Peene I, Cebeacauer L, et al. Presence of rheumatoid factor and antibodies to citrullinated peptides in systemic lupus erythematosus. *Ann Rheum Dis*. 2005;64:330-332.

5 Gottenberg JE, Mignot S, Nicaise-Rolland P, et al. Prevalence of anticyclic citrullinated peptide and anti-keratin antibodies in patients with primary Sjögren's syndrome. *Ann Rheum Dis*. 2005;64:114-117. 9 Goldbach-Mansky R, Lee J, McCoy A, et al. *Arthritis Res* 2000;2:236-43.

6 Wener MH, Hutchinson K, Morishima C, et al. Absence of antibodies to cyclic citrullinated peptide in sera of patients with hepatitis C virus infection and cryoglobulinemia. *Arthritis Rheum*. 2004;50:2305-2308.

7 Vallbracht J, Rieber J, Oppermann M, et al. Diagnostic and clinical value of anti-cyclic citrullinated peptide antibodies compared with rheumatoid factor isotypes in rheumatoid arthritis. *Ann Rheum Dis*. 2004;63:1079-1084.

8 Rantapaa-Dahlqvist S, de Jong BA, Berglin E, et al. Antibodies against cyclic citrullinated peptide and IgA rheumatoid factor predict the development of rheumatoid arthritis. *Arthritis Rheum*. 2003;48:2741-2749.

9 Nielsen MM, van Schaardenburg D, Reesink HW, et al. Specific autoantibodies precede the symptoms of rheumatoid arthritis: a study of serial measurements in blood donors. *Arthritis Rheum*. 2004;50:380-386.

10 Visser H, le Cessie S, Vos K, et al. How to diagnose rheumatoid arthritis early: a prediction model for persistent (erosive) arthritis. *Arthritis Rheum*. 2002;46:357-365.

For more information about the Rheumatoid Arthritis, Diagnostic Panel, please contact your Sonora Quest Laboratories Account Manager or visit www.sonoraquest.com.