



TECHNICAL NOTICE

SOUTH BEND MEDICAL FOUNDATION

January 2005

Cyclic Citrullinated Peptide IgG Antibody

EFFECTIVE DATE: February 1, 2005

DEPARTMENT: Manual Lab

METHOD: Enzyme-Linked Immunosorbent Assay (ELISA)

USE: Aid in establishing the diagnosis of Rheumatoid Arthritis

CLINICAL SIGNIFICANCE:

Cyclic Citrullinated Peptide (CCP) is an IgG antibody directed against a synthetic peptide containing citrulline. CCP is found in the joints of patients with Rheumatoid Arthritis (RA) and is elevated in serum. It has been found to be a moderately sensitive and very specific laboratory test for diagnosing patients with RA.

Until recently, the only serologic test routinely used for this purpose was the detection of rheumatoid factor (RF) in serum. Unfortunately, RF is seen in only 50-90% of adult RA patients and, less commonly, in patients with the juvenile form of the disease. Additionally, people with infection, other autoimmune diseases, and some healthy individuals also may be RF positive. In contrast to these statistics, approximately 70-80% of patients with RA are positive for CCP IgG antibody, while only 2% of healthy individuals and patients with non-RA diseases have been reported to be positive.

Therefore, CCP IgG Antibody offers an alternative for diagnosing RA that is as sensitive and more specific than the traditional testing.

REFERENCE RANGE:

- Negative: <20 U
- Weak positive: 20-39 U
- Moderate positive: 40-59 U
- Strong positive: ≥60 U

SPECIMEN AND COLLECTION REQUIREMENTS:

- **PREFERRED SPECIMEN:** Serum from gold top (gel barrier) tube
- **ALTERNATE SPECIMEN:** Serum from red top (no additives) tube
- **REQUESTED VOLUME:** 0.5 mL (min: 0.2 mL)
- **COLLECTION:** Routine venipuncture
- **PROCESSING:** Clot 30 minutes; centrifuge 15 minutes; refrigerate sample and transport refrigerated
NOTE: If sample will not be received by SBMF within 48 hours of time collected, transfer serum to separate plastic tube and freeze
- **STABILITY:** • 8 hours room temperature (20-30°C) • 48 hours refrigerated (2-8°C)
• 1 month frozen (-20°C) – do not use frost-free units that undergo repeated freeze/thaw cycles
- **STORAGE/TRANSPORT:** Refrigerated (48 hours) or frozen
- **CAUSES FOR REJECTION:** Severely hemolyzed or severely lipemic

TESTING SCHEDULE: Run Tuesday and Thursday; if received by 7:00 am, reported same day by 5:00 pm

ORDER: Cyclic Citrullinated Peptide IgG Antibody Test #: **28115** CPT: 83516

Please direct questions or comments regarding this notice to William J. Kaliney, M.D. or Deborah H. Sun, Ph.D., at South Bend Medical Foundation, (574) 234-4176 or (800) 544-0925.

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