

# Technical Data

Kit Size	96 test
Sample Dilution	1:100
Assay Timing	30 + 30 +10
Standards	0, 6.25, 12.5, 25, 50 & 100 U/ml
Normal Values	Less than 6.25 U/ml
Typical CVs	Within batch <5%; Between Batch <12%
Quality Control	A positive and negative control are included.
Microplate Photometer	450nm
Product code	GD110

## CPA IgG

Citrullinated protein antibodies are a family of immunoglobulins with over-lapping specificities and are now widely recognised as important markers for diagnosis and prognosis in rheumatoid arthritis (RA). They have been shown to:

- be more specific than IgM rheumatoid factors (RF) in both early and fully established disease
- predict the eventual development into RA when found in undifferentiated arthritis
- be a marker of erosive disease in RA
- be detected in healthy individuals years before onset of clinical RA

Citrullinated proteins contain a post-translationally modified form of arginine, called citrulline. The enzyme responsible for citrullination is peptidylargininedeiminase (PAD). Several proteins, all of which have important structural functions are now known to undergo citrullination including filaggrin, vimentin, myelin basic protein, trychohyalin and fibrin.

Unlike several assays using synthetic cyclic citrullinated peptides for the detection of antibodies to citrullinated protein, the Genesis Citrullinated Protein Antibody (CPA) ELISA employs citrullinated recombinant rat filaggrin as a substrate for the detection of CPA. Filaggrin is particularly rich in citrullinated residues and, interestingly, recombinant rat filaggrin has been shown to confer greater assay sensitivity than its human counterpart.

The CPA assay has been developed in association with bioMerieux and is called EDRA/CPA. (Early detection of Rheumatoid Arthritis/ Citrullinated Protein Antibodies)

The detection of citrullinated filaggrin antibodies in serum using the EDRA/CPA method provides 100% specificity and 80% sensitivity.

The EDRA/CPA kits are microplate based and easily automated. Shelf life is 18 months from the date of manufacture and the kits are CE marked.

**G · E · N · E · S · I · S**  
*Diagnos*

Eden Research Park, Henry Crabb Road, Littleport, Cambridgeshire CB6 1SE, UK  
Telephone 0044 (0) 1353 862220 Facsimile 0044 (0) 1353 863330  
Email: [genesis@elisa.co.uk](mailto:genesis@elisa.co.uk) Web: <http://www.elisa.co.uk>

A subsidiary Company of

  
**Omega**  
D I A G N O S T I C S  
G R O U P P L C