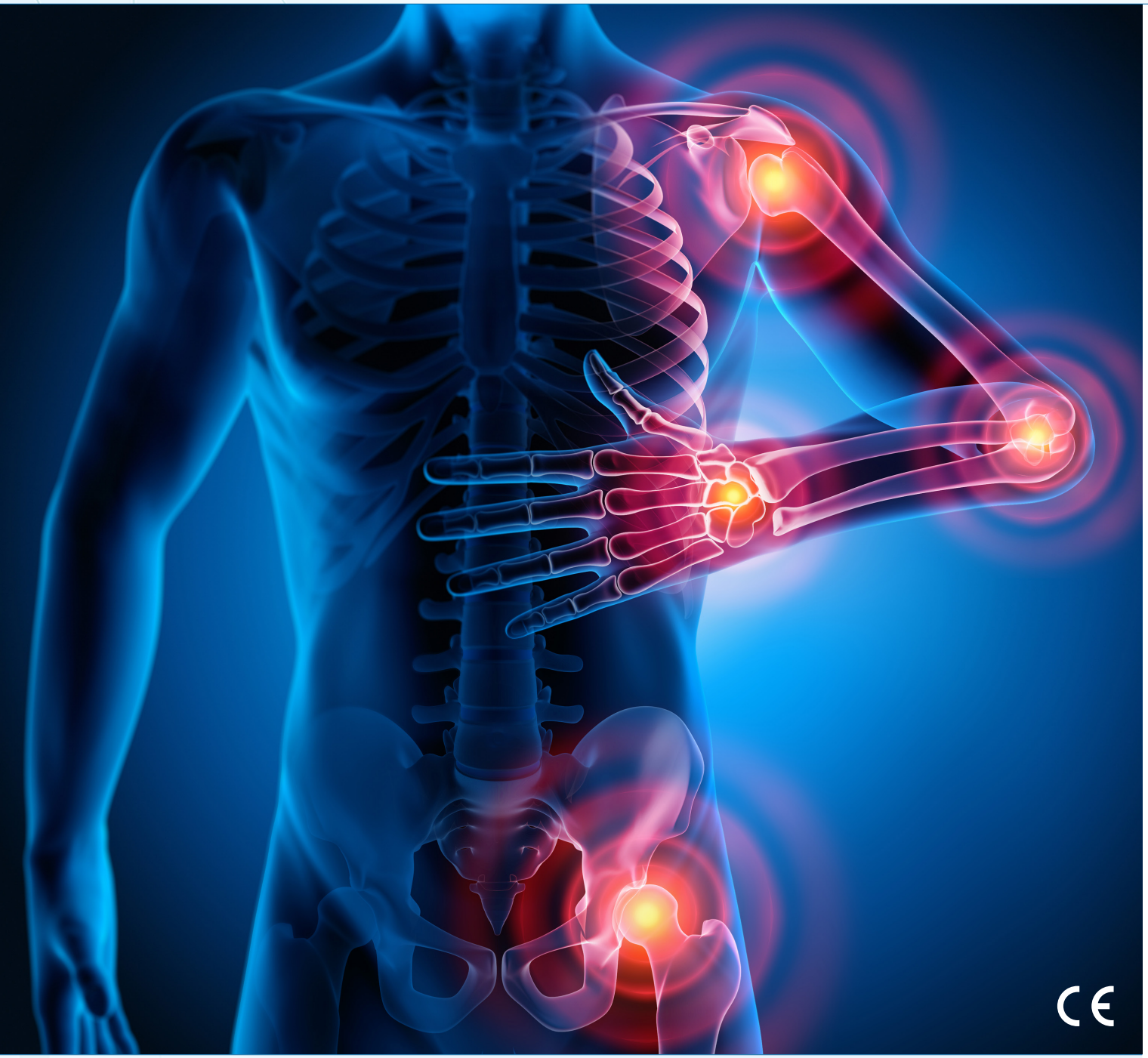
EIA

ANAscreen quant

ELISA for the quantitative determination of IgG antibodies against nuclear and cytoplasmic antigens (ANA)

Generic Assays



CE

Product Highlights

- Serological marker for systemic autoimmune diseases
- Excellent diagnostic efficiency with high sensitivity and specificity
- Automatable

YOUR RELIABLE PARTNER IN AUTOIMMUNE DIAGNOSTICS

20 Years of Experience, 150 Partners in more than 100 Countries

Nuclear and Cytoplasmic Antibodies (ANA)

Importance in the Diagnosis of Systemic Autoimmune Diseases

Autoimmune Diseases

Autoimmune diseases are based on disorders of the immune system. Synthesized antibodies and autoreactive T cells are directed against endogenous structures and lead to local or systemic inflammatory reactions. In principle, any organ or tissue can be affected by an autoimmune disease. Accordingly, hundreds of autoimmune diseases have been described so far, which can be roughly divided into three groups: In organ-specific autoimmune diseases, individual organs are affected. Systemic, non-organ-specific autoimmune diseases include, for example, collagenosis or other systemic, inflammatory rheumatic diseases. In these cases, antibodies against nuclear or cytoplasmic antigens, which are found in almost all cells in the body, are often detected. In addition, different mixed forms of organ-specific and systemic autoimmune diseases are described.

Epidemiology

About 5 to 10 % of the population are affected by an autoimmune disease. The most common are psoriasis, rheumatoid arthritis (RA), diabetes mellitus type 1, multiple sclerosis, Crohn's disease and autoimmune thyroid diseases such as Hashimoto's thyroiditis and Graves' disease. In general, autoimmune diseases are more common in women than in men.

Diagnosis

The diagnosis of autoimmune diseases is made on the basis of the clinical symptoms and laboratory medical examinations. The clinical suspicion is confirmed in particular by the detection of antibodies against nuclear or cytoplasmic antigens (ANA) as a characteristic feature in systemic autoimmune diseases such as systemic lupus erythematosus (SLE), Sjögren's syndrome, progressive systemic sclerosis (PSS), mixed collagenosis (MCTD), rheumatoid arthritis (RA) or dermatomyositis. The ELISA (Enzyme Linked Immunosorbent Assay) based on a mixture of HeLa cell nuclei, native and recombinant antigens has proven particularly effective for the determination of IgG antibodies. The immunoassay offers the possibility of a sensitive antibody detection.

ELISA

The ELISA is an immunoassay for the determination of specific antibodies. The strips of the microtiter plate are coated with test-specific antigens. If antibodies are present in the patient´s sample, they bind to the antigens. A secondary antibody conjugated with the enzyme peroxidase detects the generated immune complex. A colorless substrate is converted into the colored product. The signal intensity of the reaction product is proportional to the antibody activity in the sample. After stopping the signal intensity of the reaction product is measured photometrically.

ANAscreen quant – ELISA for the quantitative Determination of IgG Antibodies against Nuclear and Cytoplasmic Antigens

Antigen

The ANAscreen quant is based on the use of a mixture of HeLa nuclei and recombinant as well as native antigens.

Calibration

The ANAscreen quant is calibrated using an internal reference sample. Results are expressed in U/mL.

Precision

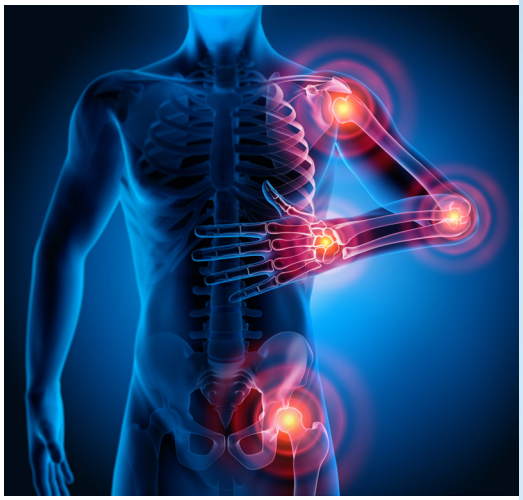
The precision of the immunoassay was assessed by the determination of the intra- and interassay variation with multiple samples of different antibody activities.

	INTRAASSAY PRECISION		INTERASSAY PRECISION	
	U/mL	CV (%)	U/mL	CV (%)
Sample 1	24	8,2	21	9,6
Sample 2	71	8,6	67	8,8
Sample 3	133	7,4	143	4,9

Diagnostic Sensitivity and Specificity

Sensitivity and specificity were assessed by the analysis of 56 samples from patients with systemic rheumatic diseases and 114 samples from unselected blood donors.

	DIAGNOSTIC PERFORMANCE
Sensitivity	96.4 %
Specificity	96.4 %



ANAscreen quant

Enzyme immunoassay for the quantitative determination of IgG antibodies against nuclear and cytoplasmic antigens in human serum

HIGH QUALITY – MADE IN GERMANY

- Use of a mixture of HeLa nuclei and recombinant as well as native antigens
- Ready-to-use (exception: wash buffer) and barcoded reagents
- Quality assured handling in routine laboratories
- Short incubation times (60 min / 30 min / 15 min) at room temperature
- Quantitative determination of IgG antibodies
- Results expressed in U/mL
- Excellent diagnostic sensitivity and specificity
- High precision within the measurement range
- CE marked
- Automatable

Product Information

ANAscreen quant

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Order Information

ANAscreen quant (96 Determinations)	**REF 5032**
ANAscreen (96 Determinations)	**REF 4010**