Biohit has developed a unique method for diagnosing systemic lupus erythematosus (SLE). The Biohit Anti-Telomere IgG ELISA test measures, by a sensitive and specific enzyme immunoassay procedure, telomere antibodies in the serum of a SLE patient.

Biohit Systemic Lupus Erythematosus Test is based on the use of the doublestranded telomeric DNA as the capture antigen for the binding of SLE antibodies. Telomeres, which represent 0.15% of the human genome, are highly repetitive sequences of the DNA [TTAGGG/CCCTAA]n at the end of eukaryotic chromosomes.

The Anti–Telomere IgG antibody test of Biohit is a sensitive and specific enzyme immunoassay procedure (ELISA) that detects anti-telomere antibodies in the serum of an SLE patient. Unlike in the conventional DNA antibody tests, which use purified calf thymus DNA as capture antigens for autoantibodies, the newly developed Biohit anti–telomere antibody assay is based on the use of double-stranded telomeric DNA as the capture antigen. This provides several advantages over the conventional anti-dsDNA tests in SLE screening.

- High affinity to Anti–Telomere IgG
- Increased specificity (human DNA sequence as a capture antigen)
- Reduced background, no cross-reactions
- High reproducibility
- Easily automated

**Clinical Background**

Systemic lupus erythematosus (SLE) is a typical autoimmune disease, which affects almost every organ of the body and which, with its various symptoms, resembles rheumatic diseases. Although SLE mainly affects women, also men and even children can be affected. Common disorders related to SLE are malar rash, discoid rash, sensitivity to sunlight, oral ulcers, arthritis, serositis, kidney problems (e.g. proteinuria), problems related with the central nervous system, blood circulation, the immune system, as well as antinuclear antibodies. Approximately 2% of the global population suffer from rheumatic diseases and 0.1 - 0.4% from SLE. On the basis of the titers of anti-telomere antibodies it is possible to distinguish SLE, e.g., from rheumatoid arthritis. The observation that telomerase activity is detected in 85% of all cancers has made the telomerase enzyme a new cancer marker and added special interest on telomere research itself.

**Ordering information**

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Product</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>604 010</td>
<td>Anti-Telomere IgG ELISA</td>
<td>96 tests</td>
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For research use only. Not for use in diagnostic procedures.