

**REAADS Anti-Centromere  
ELISA Test Kit**  
*For In Vitro Diagnostic Use*

**REAADS Anti-Centromere  
ELISA Test Kit**  
Product #: 10884  
(96 well kit)

- **Recombinant CENP-B protein is used as the antigen providing a high degree of specificity**
- **The results are expressed as quantitative values (Unit/mL) enabling changes of anti-CENP-B to be monitored**
- **Fast test turnaround**
- **Convenient ELISA procedure**

**Background**

Anti-centromere antibody (ACA) was first reported in 1980 by Moroi et al, detected in the serum from the patients with the CREST syndrome of scleroderma and PBC. Earnshaw et al, designated the antigens which are recognized by ACA CENP (CENTromere Protein) -A (17 kd), CENP-B (80 kd) and CENP-C (140 kd) according to molecular weight. They also identified four different epitopes in the CENP-B antigen from the study with affinity eluted antibodies. In 1987, they cloned the CENP-B cDNA and clarified three independent epitopes on CENP-B that were targets of auto-antibodies. Further more, they established an ELISA using a cloned fusion protein, c-term CENP-B, as antigen. The fusion protein included the c-terminal 147 amino acids carried the major epitope of CENP-B, providing a much higher sensitivity and specificity than immunofluorescence for the detection of ACA.

The REAADS anti-CENP-B ELISA is a highly specific and sensitive test for anti-Centromere antibody present in the serum.

**Procedure**

This product utilizes the commonly employed heterogeneous noncompetitive indirect solid-phase method of enzyme-linked immunosorbent assays (ELISA).

Human serum is reacted with antigen coated onto microtiter wells. Antibodies, if present, will react with the immobilized antigen forming stable antigen-antibody complexes. If no antibodies are present, the complexes will not form and the serum components will be washed away. Horseradish peroxidase conjugated goat anti-human antibodies (IgG, IgA and IgM heavy chain specific) are added to bind with the complexes formed in step one. If no complexes are formed in step one, the conjugate will be washed away. Peroxidase substrate solution (TMB) is added to produce a color change when reacted with the complexes formed in steps one and two. After terminating the enzyme reaction by adding stop solution, the color intensity of the reaction is measured photometrically. The color intensity of the reaction depends on the amount of antibody, if present, in the human serum.

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**Each REAADS Anti-CENP-B  
ELISA Test Kit contains the  
following reagents:**

96 antigen coated microwells in frame	12 x 8 strips
Calibrator-1 (0 U/mL) (ready to use)	1 x 1.5 ml
Calibrator-2 (100 U/mL) (ready to use)	1 x 1.5 ml
Positive Control (ready to use)	1 x 0.2 ml
Negative Control (ready to use)	1 x 0.2 ml
Conjugated Reagent (ready to use) (HRP conjugated goat anti-human immunoglobulins)	1 x 20 ml
Assay Diluent	2 x 50 ml
Wash Concentrate (10x)	1 x 100 ml
Substrate (ready to use)	1 x 20 ml
Stop Solution (ready to use)	1 x 20 ml



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