

REAADS Anti-Mitochondria M2 ELISA Test Kit

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Product #: 10877
(96 well kit)

*Not FDA Cleared for Diagnostic Use in the
United States*

- **Purified PDH is used as the antigen providing a high degree of specificity**
- **The results are expressed as quantitative values (Unit/mL) enabling changes of Anti-Mitochondria values to be monitored**
- **Fast test turnaround**
- **Convenient ELISA procedure**
- **No Prozone phenomenon**

Background

Primary biliary cirrhosis (PBC) is a chronic idiopathic autoimmune liver disease characterized by the specific destruction and obliteration of the intrahepatic bile ducts. The major serologic feature of this disease is the production of anti-mitochondrial antibodies (AMA). These antibodies react with multiple targets within mitochondria designated M1-M9, M2 has proven to be a specific marker for the serological diagnosis of PBC. It was difficult to detect anti-M2 antibody with high specificity until the corresponding antigen was identified. Gershwin et al. (1988) reported that the major M2 antigen was E2 component of pyruvate dehydrogenase complex (PDH)₄.

The REAADS anti-Mitochondria M2 ELISA test is a highly specific and sensitive test for, anti-Mitochondria M2 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.

**REAADS Anti-Mitochondria M2
ELISA Test Kit**

**Each REAADS M2 ELISA
Test Kit contains the
following reagents:**

96 antigen coated microwells in frame	12 x 8 well strips
Anti-PDH Standard Sera (6 standards) (ready to use)	6 x 1.2 ml
Conjugated Reagent (ready to use) (HRP conjugated Goat anti-human immunoglobulins)	2 x 7 ml
Assay Diluent (5x)	1 x 50 ml
Washing Buffer	3 bags
Substrate A	3 tablets
Substrate B	3 x 12 ml
Stop Solution (ready to use)	1 x 18 ml