



User's Manual

Thrombin IgG/IgM ELISA Kit

REF

DEIABL375



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RUO

This product is for research use only and is not intended for diagnostic use.

For illustrative purposes only. To perform the assay the instructions for use provided with the kit have to be used.

Creative Diagnostics

 **Address: 45-1 Ramsey Road, Shirley, NY 11967, USA**

 **Tel: 1-631-624-4882 (USA) 44-161-818-6441 (Europe)**  **Fax: 1-631-938-8221**

 **Email: info@creative-diagnostics.com**  **Web: www.creative-diagnostics.com**

PRODUCT INFORMATION

Intended Use

Thrombin IgG / IgM ELISA is a solid phase enzyme immunoassay employing native human thrombin for the quantitative and qualitative detection of IgG and/or IgM antibodies against thrombin in human serum.

The assay is a tool in the diagnosis of the anti-phospholipid syndrome (APS).

General Description

Thrombin IgG/IgM ELISA is a solid phase enzyme immunoassay employing native human thrombin for the quantitative detection of IgG and / or IgM antibodies against thrombin in human serum. The assay is a tool in the diagnosis of the anti-phospholipid syndrome (APS). Thrombin is not a normal constituent of the circulating blood. It is generated by the catalytic cleavage of its plasma precursor, prothrombin (factor II), by the activated Stuart factor (factor Xa). This is the final step of the intrinsic and extrinsic pathways of coagulation. The transformation requires the presence of an activated cofactor, factor Va, released from factor V by thrombin itself, and whose binding to prothrombin accelerates the activity of factor Xa in a non-enzymatic manner. Thrombin is a glycoprotein formed by two peptides chains of 36 and 259 amino-acids linked by disulfure bonds. Three important sites have been identified on the surface of the enzyme: The catalytic site that confers to the molecule its serine protease activity, the exosite one responsible for the binding of the substrate (fibrinogen or thrombin receptor) and the exosite two responsible for the binding of antithrombin III and inactivation of thrombin. Thrombin is, however, more than a simple plasma enzyme. Its properties to stimulate platelets and cause them to expand aggregate and release components of the alpha and dense granules were recognized earlier on. The presence of anti-thrombin antibodies has been associated with the clinical features of the so-called antiphospholipid syndrome (APS). Anti-Thrombin antibodies seem to correlate with deep venous thrombosis.

Storage

2-8°C

Precision

Intra-Assay		
Sample No.	Mean (U/ml)	CV (%)
1	20.7	1.2
2	45.2	3.1
3	114.5	6.8

Inter-Assay		
Sample No.	Mean (U/ml)	CV (%)
1	18.4	1.8
2	47.5	2.6
3	126.4	6.5

Detection Range

0 - 300 U/mL, cut-off 15 U/mL

Sensitivity

1.0 U/ml