

### Datasheet for ABIN996881

# beta2-GP1 Ab IgG ELISA Kit



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Quantity:	96 tests
Target:	beta2-GP1 Ab IgG
Reactivity:	Human
Method Type:	Competition ELISA
Application:	ELISA
Product Details	
Purpose:	ß2GP1 IgG Enzyme-linked Immunosorbent Assay (ELISA) is intended for the detection and
	semiquantitative determination of IgG antibodies to ß2GP1 in human sera or plasma.
Analytical Method:	Semi-Quantitative
Detection Method:	Colorimetric
Specificity:	92 %
Target Details	
Target:	beta2-GP1 Ab IgG
Abstract:	beta2-GP1 Ab IgG Products
Target Type:	Antibody
Background:	Anti- Cardiolipin autoantibodies (ACA) are described for various autoimmune diseases. The
	presence of anti-cardiolipin antibodies in systemic lupus erythematosus (SLE) can be related to
	the development of thrombocytopenia, in gynaecology they are supposed to cause intrauterine

death or recurrent abortion. Furthermore, anti-cardiolipin antibodies have been found in some

non-thrombotic neurological disorders like cerebrovascular insufficiency, cerebral ischemia or chorea and in myocardial infarction. Recent studies have shown that a 50kD serum cofactor is required for anticardiolipin antibodies, to bind to cardiolipin which has been coated onto plastic plates. The cofactor has been identified as beta 2 -glycoprotein 1 also termed apolipoprotein H. beta 2 GP1 has been known as an in vitro inhibitor of the intrinsic blood coagulation pathway, ADP-dependent aggregation, and prothrombinase activity of activated platelets. It has become apparent that anticardiolipin antibody from patients with anti-phospholipid syndrome (APS) recognize a modified beta 2 GP1 structure and not cardiolipin, native beta 2 GP1 or an epitope structurally defined by both cardiolipin and beta 2 GP1.

Galli et al. and Viard, et al. reported that anti-cardiolipin antibody derived from SLE and APS were directed to the beta 2 GP1 molecule coated on polystyrene plates. Koike and Matsuura showed conclusively that beta 2 GP1 is indeed the antigen to which many anticardiolipin antibody patients are actually binding and furthermore showed that the phospholipid merely serves to link the beta 2 GP1 to the solid phase. Anti-beta 2 GP1 autoantibodies are found in the immunoglobulin classes IgG, IgM and IgA. The determination of IgM antibodies is a valuable indicator in the diagnosis of beginning autoimmune disease, whereas IgG and/or IgA antibodies will be found in progressive stages of manifested autoimmune disorders. IgA antibodies are often associated with IgG antibodies. The determination of IgA antibodies seems to have a greater validity in thrombosis and fetal loss.. Indications for determination of anti beta 2 GP1 antibodies are: SLE, Thrombosis, Thrombocytopenia, Cerebral Ischemia, Chorea, Epilepsy, Recurrent Abortion and Intrauterine Death.

### **Application Details**

#### Comment:

#### **Quality Control:**

1. The negative control and positive control should be run with every batch of samples tested and the concentration must be within the range stated on its label. Among 19 samples which reference ELISA tested for positive and ELISA tested for negative, 12 samples were tested for negative by a second reference ELISA . Among 5 samples which reference ELISA tested for negative and ELISA tested for positive, 3 samples were tested for positive results by a second reference ELISA .

Limitations of procedure:

1. Diagnosis cannot be made on the basis of anti beta2 GP1 results alone. These results must be used in conjunction with information from clinical evaluation and other diagnostic procedure.

## **Application Details**

	2. When a high tier of anti beta2 GP1 IgM in the presence of a high tier of RF IgM in a certain sample, there is a pote
Sample Volume:	5 μL
Assay Time:	1 - 2 h
Plate:	Pre-coated
Restrictions:	For Research Use only
Handling	
Storage:	4 °C
Expiry Date:	12 months