# IgG<sub>2</sub> (3C7): sc-52004



The Power to Question

#### **BACKGROUND**

 $\lg G$  is a monomeric immunoglobulin composed of two heavy chains and two light chains. There are four subclasses of the  $\lg G$ :  $\lg G_1$ ,  $\lg G_2$ ,  $\lg G_3$  and  $\lg G_4$ . Each molecule has two antigen binding sites.  $\lg G$  is the most abundant immunoglobulin as well as the only isotype that can pass through the placenta, thereby providing protection to the fetus in its first weeks of life before, its own immune system has developed.  $\lg G$  can bind to several different kinds of pathogens, for example viruses, bacteria and fungi, and it protects the body against them by complement activation (the classic pathway), opsonization for phagocytosis and neutralization of their toxins.

# **REFERENCES**

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# CHROMOSOMAL LOCATION

Genetic locus: IGHG2 (human) mapping to 14g32.33.

#### **SOURCE**

 $\lg G_2 \, (3C7)$  is a mouse monoclonal antibody raised against  $\lg G_2 \, \text{of human}$  origin.

### **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### **PRODUCT**

Each vial contains 100  $\mu g$   $lgG_1$  in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

# **APPLICATIONS**

 $\lg G_2$  (3C7) is recommended for detection of hinge region of  $\lg G_2$  of human origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with human  $\lg G_1$ ,  $\lg G_3$ ,  $\lg G_4$ ,  $\lg G_4$ ,  $\lg G_4$  and  $\lg E_5$ .

Molecular Weight of IgG<sub>2</sub>: 36 kDa.

# **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

# **RESEARCH USE**

For research use only, not for use in diagnostic procedures

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