# IgA<sub>1</sub> (2B5): sc-51990



## **BACKGROUND**

 $IgA_1$  (immunoglobulin  $A_1$ ) antibodies are the first line of defense against microbial pathogens.  $IgA_1$  proteases are characterized by a polyprotein precursor molecule with four separate domains including an N-terminal signal peptide sequence, a surface-directed mature protease domain, a variable region, and a membrane-embedded C-terminal region that forms a  $\beta$ -barrel in the outer membrane, through which the mature protein is exported. The regions of relatively constant sequence beyond the variable regions of Immunoglobulins are termed constant regions (C regions) and are present in both the heavy and light chains. With few exceptions, the sites of attachment for carbohydrates to immunoglobulin are located in the C regions. These regions also serve to hold the variable regions together using the disulfide bond between them, facilitate interaction with the antigen and increase the maximum rotation of the arms.

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## **CHROMOSOMAL LOCATION**

Genetic locus: IGHA1 (human) mapping to 14q32.33.

# **SOURCE**

 $\lg A_1$  (2B5) is a mouse monoclonal antibody raised against  $\lg A$  of human origin.

#### **PRODUCT**

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

## **APPLICATIONS**

 $IgA_1$  (2B5) is recommended for detection of  $IgA_1$  of human origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

## **STORAGE**

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

## **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

# **PROTOCOLS**

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

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