



# human IgA Mouse mAb

human IgA Mouse mAb Catalog # AP94793

#### **Product Information**

**Application** IHC-P, IHC-F, IF

Primary Accession
Reactivity
Human
Host
Mouse
Clonality
Monoclonal
Calculated MW
Physical State
P01876
Human
House
Monoclonal
42849
Liquid

**Immunogen** purified human Serum IgA

**Isotype** IgG

**Purity** affinity purified by Protein A

**Buffer** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Secreted.

**Important Note** This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

**Background Descriptions** Monomeric IgA constitutes 5-15 % of the serum immunoglobulins whereas

dimeric IgA is localized to mucosa surfaces such as saliva, gastrointestinal secretion, bronchial fluids and milk. Mucosal IgA plays a major role in host defence by neutralising infectious agents at mucosal surfaces. The production is usually local and antigen specific IgA producing B-cells can be found in regions under the lamina propria where they mature into dimeric IgA

producing plasma cells. IgA deficiency is the most common

immunodeficiency that may affect both serum and mucosal produced IgA.

#### **Additional Information**

Other Names Immunoglobulin heavy constant alpha 1 {ECO:0000303|PubMed:11340299,

ECO:0000303 | Ref.13}, Ig alpha-1 chain C region, Ig alpha-1 chain C region BUR, Ig alpha-1 chain C region TRO, IGHA1 {ECO:0000303 | PubMed:11340299,

ECO:0000303 | Ref.13}

**Dilution** IHC-P=1:500-1500,IHC-F=1:500-1500,IF=1:500-1500

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

### **Protein Information**

Name IGHA1 {ECO:0000303|PubMed:11340299, ECO:0000303|Ref.13}

#### **Function**

Constant region of immunoglobulin heavy chains. Immunoglobulins, also known as antibodies, are membrane-bound or secreted glycoproteins produced by B lymphocytes. In the recognition phase of humoral immunity, the membrane-bound immunoglobulins serve as receptors which, upon binding of a specific antigen, trigger the clonal expansion and differentiation of B lymphocytes into immunoglobulins- secreting plasma cells. Secreted immunoglobulins mediate the effector phase of humoral immunity, which results in the elimination of bound antigens (PubMed: 20176268, PubMed: 22158414). The antigen binding site is formed by the variable domain of one heavy chain, together with that of its associated light chain. Thus, each immunoglobulin has two antigen binding sites with remarkable affinity for a particular antigen. The variable domains are assembled by a process called V-(D)-| rearrangement and can then be subjected to somatic hypermutations which, after exposure to antigen and selection, allow affinity maturation for a particular antigen (PubMed: 17576170, PubMed: 20176268). Ig alpha is the major immunoglobulin class in body secretions (PubMed:2241915).

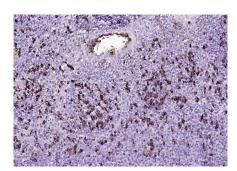
Cellular Location

[Isoform 1]: Secreted

# **Background**

Monomeric IgA constitutes 5-15 % of the serum immunoglobulins whereas dimeric IgA is localized to mucosa surfaces such as saliva, gastrointestinal secretion, bronchial fluids and milk. Mucosal IgA plays a major role in host defence by neutralising infectious agents at mucosal surfaces. The production is usually local and antigen specific IgA producing B-cells can be found in regions under the lamina propria where they mature into dimeric IgA producing plasma cells. IgA deficiency is the most common immunodeficiency that may affect both serum and mucosal produced IgA.

# **Images**



Paraformaldehyde-fixed, paraffin embedded (human tonsil); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (human IgA) Monoclonal Antibody, Unconjugated (AP94793) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructions and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.