IGHA1 Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7456b

Specification

IGHA1 Antibody (C-term) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	P01876
Other Accession	P01877
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**257-286**

IGHA1 Antibody (C-term) - Additional Information

Other Names
Ig alpha-1 chain C region, IGHA1

Target/Specificity
This IGHA1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 257-286 amino acids from the C-terminal region of human IGHA1.

Dilution
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
IGHA1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

IGHA1 Antibody (C-term) - 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)-J 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).
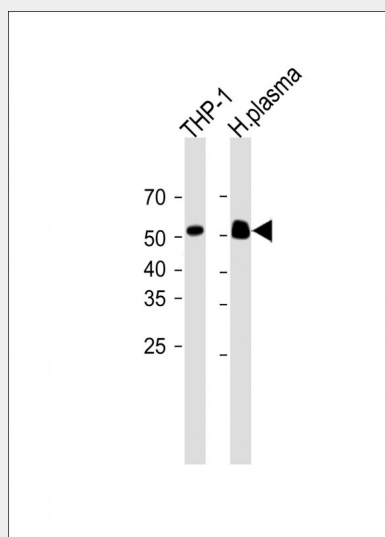
Cellular Location
[Isoform 1]: Secreted

IGHA1 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture
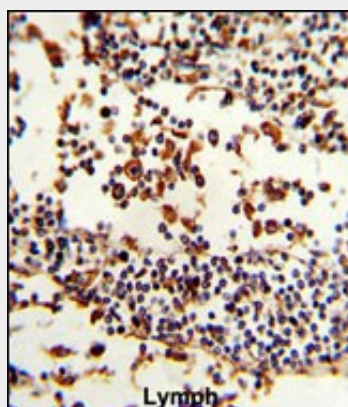
IGHA1 Antibody (C-term) - Images

All lanes: Anti-IGHA1 Antibody (C-term) at 1:2000 dilution Lane 1: THP-1 whole cell lysate Lane 2: Human plasma lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 55 KDa Blocking/Dilution buffer: 5% NFDM/TBST.
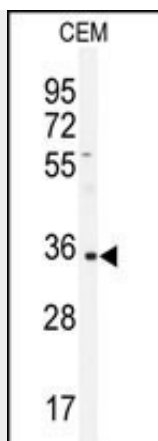
Western blot analysis of IGHA1 antibody (C-term) (Cat.#AP7456b) in CEM cell line lysates (35ug/lane). IGHA1 (arrow) was detected using the purified Pab .
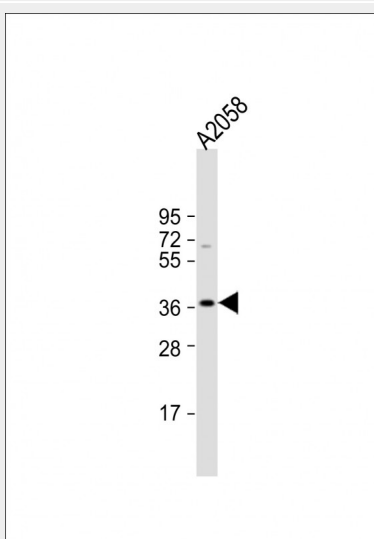
Anti-IgA Antibody (C-term) at 1:1000 dilution + A2058 whole cell lysate Lysates/proteins at 20 μg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 38 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Formalin-fixed and paraffin-embedded human Lymph reacted with IGHA1 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.
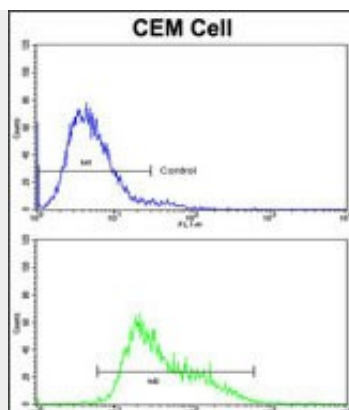
Flow cytometric analysis of CEM cells using IGHA1 Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

IGHA1 Antibody (C-term) - Background

Ig alpha is the major immunoglobulin class in body secretions. The protein may serve both to defend against local infection and to prevent access of foreign antigens to the general immunologic system.

IGHA1 Antibody (C-term) - References

Flanagan J.G., Lefranc M.-P.Cell 36:681-688(1984)
Putnam F.W., Liu Y.-S.V.J. Biol. Chem. 254:2865-2874(1979)
Hatzivassiliou G., Miller I.Immunity 14:277-289(2001)