

# IgG (Immunoglobulin Gamma Heavy Chain) (B-Cell Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone B33/20] Catalog # AH11522

#### Specification

### IgG (Immunoglobulin Gamma Heavy Chain) (B-Cell Marker) Antibody - With BSA and Azide - Product Information

Application Primary Accession Other Accession

Reactivity Host Clonality Isotype Calculated MW ,14,3,4, <u>P01857</u> <u>3500 (IGHG1)</u>, <u>3501 (IGHG2)</u>, <u>3502 (IGHG3)</u>, <u>3503 (IGHG4)</u>, <u>510635</u>, <u>P01859</u>, <u>P01860</u>, <u>P01861</u> Human Mouse Monoclonal Mouse / IgG1, kappa 75kDa KDa

#### IgG (Immunoglobulin Gamma Heavy Chain) (B-Cell Marker) Antibody - With BSA and Azide - Additional Information

Other Names Ig gamma-1 chain C region, IGHG1

Storage

Store at 2 to 8°C.Antibody is stable for 24 months.

**Precautions** 

IgG (Immunoglobulin Gamma Heavy Chain) (B-Cell Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

### IgG (Immunoglobulin Gamma Heavy Chain) (B-Cell Marker) Antibody - With BSA and Azide - Protein Information

Name IGHG1 {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:<a href="http://www.uniprot.org/citations/20176268" target="\_blank">20176268</a>, PubMed:<a href="http://www.uniprot.org/citations/20176268" target="\_blank">20176268</a>). 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:<a href="http://www.uniprot.org/citations/17576170" target="\_blank">17576170</a>, PubMed:<a href="http://www.uniprot.org/citations/20176268" target="\_blank">20176268</a>). Mediates IgG effector functions on monocytes triggering ADCC of virus- infected cells.

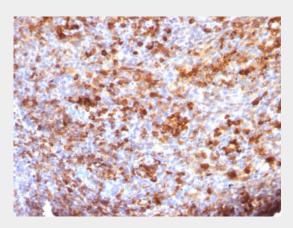
Cellular Location [Isoform 1]: Secreted

## IgG (Immunoglobulin Gamma Heavy Chain) (B-Cell Marker) Antibody - With BSA and Azide - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

IgG (Immunoglobulin Gamma Heavy Chain) (B-Cell Marker) Antibody - With BSA and Azide - Images



Formalin-fixed, paraffin-embedded human Tonsil stained with IgG Monoclonal Antibody (B33/20)

#### IgG (Immunoglobulin Gamma Heavy Chain) (B-Cell Marker) Antibody - With BSA and Azide - Background

Recognizes a protein of 75kDa, identified as  $\gamma$  heavy chain of human immunoglobulins. Its epitope maps in CH2 domain of Fc region of IgG. It reacts with all sub-classes of  $\gamma$  chain of human immunoglobulins. It does not cross-react with  $\alpha$  (IgA),  $\mu$  (IgM),  $\epsilon$  (IgE), or  $\delta$  (IgD), heavy chains, T-cells, monocytes, granulocytes, or erythrocytes. This MAb is useful in the identification of leukemias, plasmacytomas, and certain non-Hodgkin rightings lymphomas. The most common feature of these malignancies is the restricted expression of a single heavy chain class. Demonstration of clonality in lymphoid infiltrates indicates that the infiltrate is clonal and therefore malignant.