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

Mouse Monoclonal Antibody [Clone IG217 ]
Catalog # AH10496

## Product Information

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| **Application** | IF, FC, IHC-P |
| **Primary Accession** | P01857 |
| **Other Accession** | 3500 (IGHG1), 3501 (IGHG2), 3502 (IGHG3), 3503 (IGHG4), 510635, P01859, P01860, P01861 |
| **Reactivity** | Human |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Isotype** | Mouse / IgG1, kappa |
| **Clone Names** | IG217 |
| **Calculated MW** | 43912 |

## Additional Information

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| **Other Names** | Ig gamma-1 chain C region, IGHG1 |
| **Application Note** | IF~~1:50~200 FC~~1:10~50 IHC-P~~N/A |
| **Format** | 200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml. |
| **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. |

## Protein Information

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| **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:20176268, PubMed:22158414). The antigen binding site is formed by the variable |

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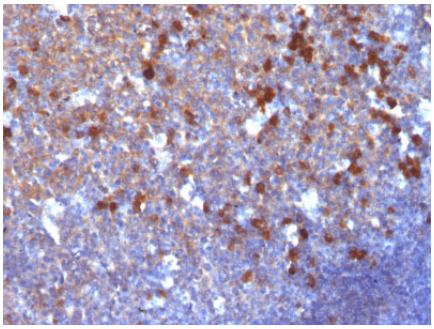
| | domain of one heavy chain, together with that of its associated light chain. Thus, each immunoglobulin has two antigen binding sites with remarkable affinity for a particular antigen. The variable domains are assembled by a process called V-(D)-J rearrangement and can then be subjected to somatic hypermutations which, after exposure to antigen and selection, allow affinity maturation for a particular antigen (PubMed:17576170, PubMed:20176268). Mediates IgG effector functions on monocytes triggering ADCC of virus-infected cells. |
| **Cellular Location** | [Isoform 1]: Secreted |

## Background

Recognizes a protein of 75kDa, identified as γ heavy chain of human immunoglobulins. It reacts with all sub-classes of γ chain of human immunoglobulins. It does not cross-react with α (IgA), μ (IgM), ε (IgE), or δ (IgD), heavy chains, T-cells, monocytes, granulocytes, or erythrocytes. This MAb is useful in the identification of leukemias, plasmacytomas, and certain non-Hodgkin □s 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.

## Images



Formalin-fixed, paraffin-embedded human Tonsil stained with IgG Monoclonal Antibody (IG217)