

Human IgG1 Rabbit mAb

Catalog # AP78752

Product Information

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|--------------------------|---|
| Application | WB |
| Primary Accession | P01857 |
| Reactivity | Human |
| Host | Rabbit |
| Clonality | Monoclonal Antibody |
| Isotype | IgG |
| Conjugate | Unconjugated |
| Immunogen | A synthesized peptide derived from human IgG1 |
| Purification | Affinity Chromatography |
| Calculated MW | 43912 |

Additional Information

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| Other Names | IGHG1 |
| Dilution | WB~~1/500-1/1000 |
| Format | Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol. |
| Storage | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles. |

Protein Information

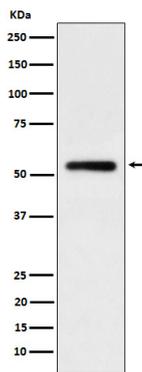
| | |
|-----------------|---|
| Name | IGHG1 {ECO:0000303 PubMed:11340299, ECO:0000303 Ref.14} |
| Function | <p>Constant region of immunoglobulin (Ig) heavy chains. Igs are membrane-bound or secreted glycoproteins produced by B lymphocytes. In the recognition phase of humoral immunity, the membrane-bound Igs serve as receptors, which upon binding to a specific antigen trigger the clonal expansion and differentiation of B lymphocytes into Ig-secreting plasma cells. Secreted Igs known as antibodies mediate the effector phase of humoral immunity by blocking the interaction of infectious antigens with cellular receptors (via the antigen-binding region) and eliciting effector mechanisms that lead to pathogen neutralization (via the constant region) (PubMed:17576170, PubMed:20176268, PubMed:22158414). The antigen-binding region is formed by the variable domain of one heavy chain paired with the variable domain of its associated light chain. Each Ig molecule has two antigen-binding sites with remarkable affinity for a particular antigen due to V-(D)-J rearrangement, somatic hypermutations and affinity maturation of the variable domains upon antigen exposure (PubMed:17576170, PubMed:20176268, PubMed:22158414). The constant region defines the Ig</p> |

isotype that perform distinct sets of effector functions. B cells diversify and rearrange their Ig constant regions through class-switch recombination, a process by which the constant region is switched from one Ig isotype to another, namely from IgM and IgD to IgG, IgA and IgE (PubMed:[17576170](#), PubMed:[20176268](#), PubMed:[22158414](#)). The constant region of Ig gamma-1 (IgG1) isotype interacts (via the fragment crystallizable, Fc) with receptors on innate immune cells and the complement system to mediate humoral effector functions, including antibody-dependent cellular cytotoxicity or phagocytosis, complement- dependent cytotoxicity and inflammatory responses.

Cellular Location

[Isoform 1]: Secreted

Images



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