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Human IgG2 Antibody

Rabbit mAb
Catalog # AP91891

Product Information

Application	WB, IHC, IF, ICC, IHF
Primary Accession	P01859
Reactivity	Human
Clonality	Monoclonal
Other Names	IGHG2; immunoglobulin Gm2; immunoglobulin heavy constant gamma 2 (G2m marker);
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	43806

Additional Information

Dilution	WB 1:1000~1:5000 IHC 1:100~1:500 ICC/IF 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human IgG2
Description	There are four IgG subclasses (IgG1, 2, 3 and 4) in humans, named in order of their abundance in serum (IgG1 being the most abundant). IgG2 is the only IgG subclass which passes through the placenta at a level generally lower than that found in the mother.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

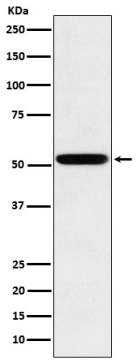
Protein Information

Name	IGHG2 {ECO:0000303|PubMed:11340299, ECO:0000303|Ref.14}
Function	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 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 interacts (via the fragment crystallizable, Fc) with receptors on innate immune cells and the complement system to mediate humoral effector functions. Ig gamma-2 (IgG2) isotype formed against polysaccharide structures found on encapsulated bacteria elicits antibody-dependent protection through activation of complement pathway.

Cellular Location [Isoform 1]: Secreted

Images



Western blot analysis of human IgG2 expression in Human spleen lysate.

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