Product Datasheet

IgG Antibody (orb248388)

Catalog Number	orb248388
Category	Antibodies
Description	Immunoglobulin gamma (IgG) is the most common class of antibody in blood and extracellular fluid. Approximately 75% of serum antibodies in humans are IgG. There are four immunoglobulin gamma subclasses: one, two, three and four. IgG1 is the most common, with 68% of all gamma class antibodies being G1, and G4 is the least common at 4%. Gamma class antibodies are found primarily in the secondary immune response, class switching from IgM and IgD. They are the only class of antibody that can cross the placenta, and along with IgA secreted in breast milk, provide the neonate with humoral immunity before immune system development occurs.This antibody recognizes a protein of 75kDa identified as the gamma heavy chain of human immunoglobulins. It does not cross-react with alpha, mu, epsilon, or delta heavy chains, T-cells, monocytes, granulocytes, or erythrocytes. The IgG antibody 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.
Clonality	Monoclonal
Species/Host	Mouse
Isotype	Mouse IgG2a, kappa
Conjugation	Unconjugated
Reactivity	Human
Buffer/Preservatives	0.2 mg/ml in 1X PBS with 0.1 mg/ml rAlbumin and 0.05% sodium azide
Purification	Protein G affinity chromatography

Immunogen	Purified human IgG heavy chain was used as the immunogen for this anti-IgG antibody.
Tested applications	FACS, IF, IHC-P
Dilution range	Flow cytometry: 1-2ug/10^6 cells,Immunofluorescence: 1-2ug/ml,Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Application notes	The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the anti-IgG antibody to be titered up or down for optimal performance.1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.
Antibody Type	Primary Antibody
Clone Number	IG266
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.
Note	For research use only
Expiration Date	12 months from date of receipt.
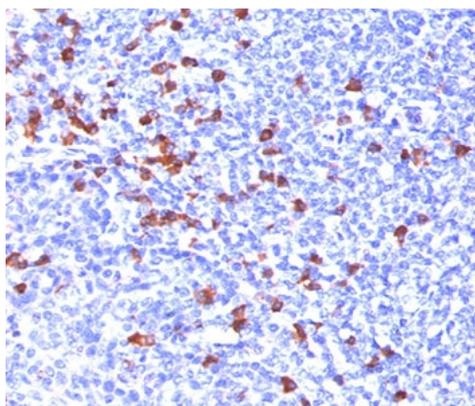
IHC testing of human tonsil stained with anti-IgG antibody (IG266). HIER: boil tissue sections in 10mM citrate buffer, pH6, for 10-20 min and allow to cool before testing.
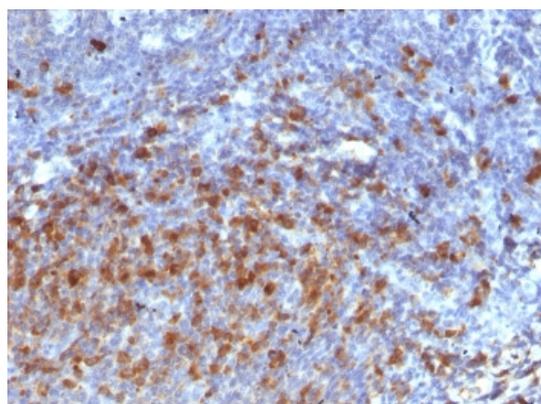
IHC staining of FFPE human tonsil with anti-IgG antibody. HIER: boil tissue sections in pH9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.

Human Protein Microarray Specificity Validation

Rank	Protein	Z score	S score
1	IGHG1	137.8	113.93
2	IGHG3	23.87	19.21
3	FKBP1B	4.66	0.07
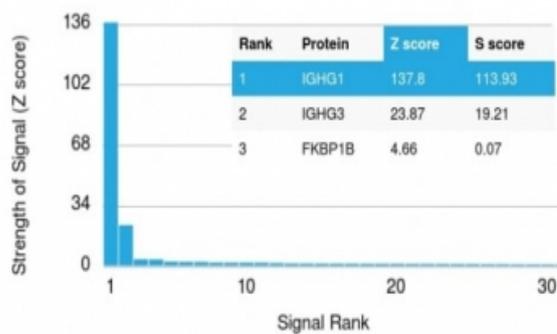
Analysis of HuProt (TM) microarray containing more than 19,000 full-length human proteins using anti-IgG antibody (clone IG266). These results demonstrate the foremost specificity of the IG266 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt (TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt (TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.
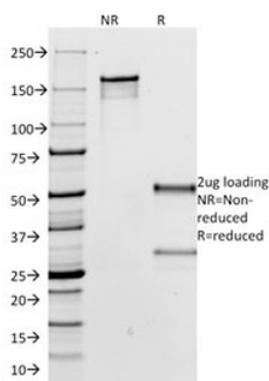
SDS-PAGE analysis of purified, BSA-free anti-IgG antibody (clone IG266) as confirmation of integrity and purity.