Product Datasheet

IgG Heavy Chain Antibody (orb248388)

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.
Species/Host	Mouse
Reactivity	Human
Conjugation	Unconjugated
Tested Applications	FACS, IF, IHC-P
Immunogen	Purified human IgG heavy chain was used as the immunogen for this anti-IgG antibody.
Preservatives	0.2 mg/ml in 1X PBS with 0.1 mg/ml rAlbumin (US sourced) and 0.05% sodium azide
Storage	Store the anti-IgG antibody at 2-8°C (with azide) or aliquot and store at -20°C or colder (without azide).
Note	For research use only

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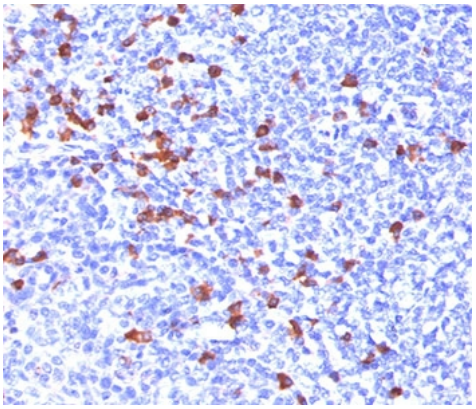
Application notes	The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the anti-IgG antibody to be titered up or down for optimal performance.1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes.2. 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.
Formula	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide
Isotype	Mouse IgG2a, kappa
Clonality	Monoclonal
Clone Number	IG266
Antibody Type	Primary Antibody
Purity	Protein G affinity chromatography
Hazard Information	This anti-IgG antibody is available for research use only.
Entrez	**3500**
Dilution Range	Flow cytometry: 1-2ug/million cells,Immunofluorescence: 1-2ug/ml,Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
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.

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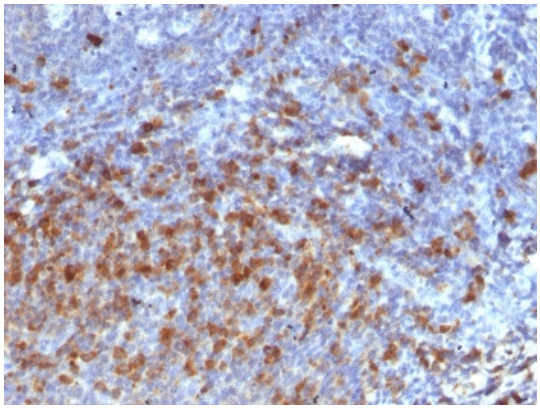
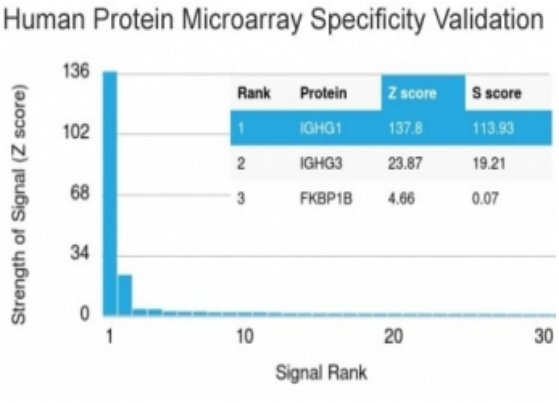
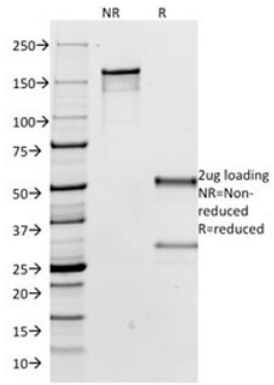


IHC staining of FFPE human tonsil with anti-IgG antibody. HIER: boil tissue sections in pH9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



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.

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