

## Recombinant IgG4 (Ig Heavy Constant Gamma 4) (G4m Marker) Antibody

Rabbit Monoclonal Antibody [Clone IGHG4/2042R]

Catalog No	Format	Size
3503-RBM2-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
3503-RBM2-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
3503-RBM2-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

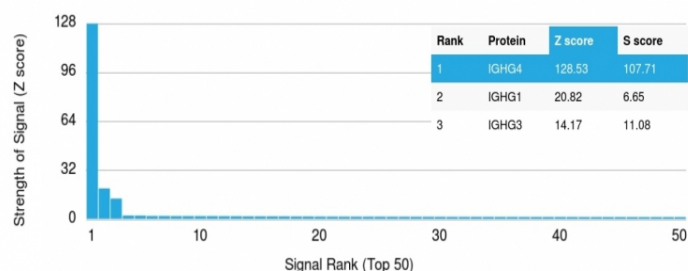
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

### Product Details

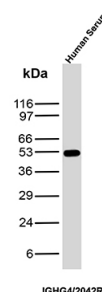
<b>Clone</b>	IGHG4/2042R
<b>Gene Name</b>	IGHG4
<b>Immunogen</b>	Recombinant full-length human IGHG4 protein
<b>Host</b>	Rabbit
<b>Clonality</b>	Monoclonal
<b>Isotype / Light Chain</b>	IgG / Kappa
<b>Mol. Weight of Antigen</b>	150kDa
<b>Cellular Localization</b>	Cell membrane, Secreted
<b>Species Reactivity</b>	Human
<b>Positive Control</b>	Tonsil. Human Serum

*\*Optimal dilution for a specific application should be determined.*

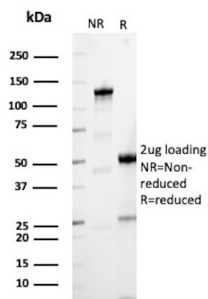
### Product Images for Recombinant IgG4 (Ig Heavy Constant Gamma 4) (G4m Marker) Antibody



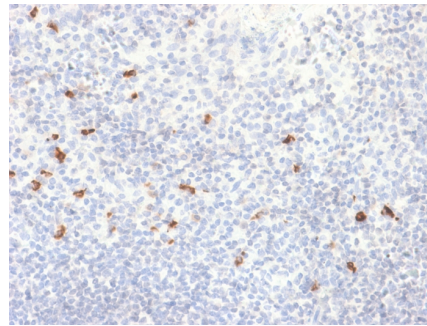
Analysis of Protein Array containing more than 19,000 full-length human proteins using IgG4 Recombinant Rabbit Monoclonal Antibody (IGHG4/2042R). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (Monoclonal Antibody) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a Monoclonal Antibody to its intended target. A Monoclonal Antibody is considered to be specific to its intended target, if the Monoclonal Antibody has an S-score of at least 2.5. For example, if a Monoclonal Antibody binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that Monoclonal Antibody to protein X is equal to 29.



Western Blot Analysis of Human Serum lysate using IgG4 Recombinant Rabbit Monoclonal Antibody (IGHG4/2042R)



SDS-PAGE Analysis of Purified Immunoglobulin heavy constant gamma 4 Recombinant Rabbit Monoclonal Antibody (IGHG4/2042R). Confirmation of Purity and Integrity of Antibody.



Formalin-fixed, paraffin-embedded human Tonsil stained with IgG4 Recombinant Rabbit Monoclonal Antibody (IGHG4/2042R).

### Specificity & Comments

The regions of relatively constant sequence beyond the variable regions of immunoglobulins are termed constant regions (C regions) and are present in both the heavy and light chains. With very few exceptions, the sites of attachment for carbohydrates on immunoglobulins are located in these C regions. These regions also function to hold the variable regions together by using the disulfide bond between them. The C regions facilitate interaction with the antigen by increasing the maximum rotation of the immunoglobulin arms. Reportedly, a large population of patients with recurrent respiratory tract infection has low IgG4 concentrations. IgG4-related sclerosing disease has been recognized as a systemic disease entity characterized by an elevated serum IgG4 level, sclerosing fibrosis, and diffuse lympho-plasmacytic infiltration with the presence of many IgG4-positive plasma cells. IgG4 is overexpressed in inflammatory pseudo-tumor (IPT) and under expressed in inflammatory myofibroblastic tumor (IMT). In pulmonary nodular lymphoid hyperplasia (PNLH), there are an increased number of IgG4+ plasma cells.

### Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

### Supplied As

200ug/ml of Ab Purified by Protein A Column. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

### Research Areas

B Cell Markers