

## Human IgG Heavy Chain Recombinant Monoclonal Rabbit Antibody (IG507R)



## **Product Description**

This antibody recognizes a protein of 75 kDa, identified as gamma heavy chain of human immunoglobulins. It does not cross-react with alpha (IgA), mu (IgM), epsilon (IgE), or delta (IgD), heavy chains, T-cells, monocytes, granulocytes, or erythrocytes. This 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.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the <u>CF® Dye Brochure</u> for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0507, Anti-Human IgG Heavy Chain (IG507R)

## Call us : 800-304-5357 En

## Email: techsupport@biotium.com

Product attri	butes
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Product attributes	
Antibody number	#0507
Antibody reactivity (target)	Human IgG Heavy Chain
Antibody type	Primary, Anti-Human Immunoglobulin
Host species	Rabbit
Clonality	Recombinant Monoclonal
Clone	IG507R
Isotype	IgG, kappa
Molecular weight	75 kDa
Synonyms	G1m Marker; G2m Marker; G3m Marker; G4m Marker; HDC; Heavy Chain Disease Protein; Human Immunglobulin G; Ig gamma1/2/3/4 Chain C Region; IGHG1; IGHG2; IGHG3; IGHG4; Immunoglobulin Heavy Constant 1/2/3/4
Human gene symbol	IGHG
Entrez gene ID	3500 (IGHG1), 3501 (IGHG2), 3502 (IGHG3), 3503 (IGHG4) (Human)
SwissProt	P01857, P01859, P01860, P01861
Unigene	510635
Immunogen	Purified human Ig Gamma Chain
Antibody target cellular localization	Secreted (extracellular)
Verified antibody applications	IHC (FFPE) (verified)
Species reactivity	Human
Antibody application notes	Higher concentration may be required for direct detection using primary antibody, conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mL, Immunohistology (formalin): 0.5-1 ug/mL, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user
Positive control	293T, Raji or hPBL cells. Tonsil or Spleen
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 $^\circ\text{C},$ Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 $^\circ\text{C}$
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Validated in protein array	Monospecific
Antibody research areas	Cancer, Immunology, Inflammation
Cell/tissue expression	B-cells
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.
Tumor expression	Leukemia/lymphoma

Antibody # prefix Conjugation Ex/Em (nm) Laser line Detection channel **Dye Features** BNC04 CF®405S 404/431 405 DAPI (microscopy), CF®405S Features AF405 BNC88 CF®488A 490/515 488 GFP, FITC CF®488A Features BNC68 CF®568 562/583 532, 561 RFP, TRITC **CF®568** Features BNC94 CF®594 593/614 561 Texas Red® CF®594 Features BNC40 CF®640R 642/662 633-640 Cy®5 CF®640R Features BNC47 CF®647 650/665 633-640 Cy®5 CF®647 Features BNC74 CF®740 742/767 633-685 775/50 CF®740 Features N/A N/A BNCB Biotin N/A BNUB N/A N/A Purified N/A Purified, N/A N/A N/A BNUM **BSA-free** 

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