

Human IgG4 Monoclonal Mouse Antibody (IGHG4/1345)

This antibody recognizes the immunoglobulin IgG4, associated with IgG4-related disease.

Product Description

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 lymphoplasmacytic infiltration with the presence of many IgG4-positive plasma cells. IgG4 is overexpressed in inflammatory pseudotumor (IPT) and under expressed in inflammatory myofibroblastic tumor (IMT). In pulmonary nodular lymphoid hyperplasia (PNLH), there are an increased number of IgG4 plasma cells. 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 [CF® Dye Brochure](#) 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 1345, Anti-Human IgG4 (IGHG4/1345)**



Product attributes

Antibody number	1345
Reactivity (target)	Human IgG4
Antibody type	Anti-Human Immunoglobulin, Primary
Host species	Mouse
Clonality	Monoclonal
Clone	IGHG4/1345
Isotype	IgG1
Molecular weight	150 kDa
Synonyms	Ig gamma 4 chain C region; IGHG4; Immunoglobulin heavy constant gamma 4 (G4m marker)
Human gene symbol	IGHG4
Entrez gene ID	3503
SwissProt	P01861
Unigene	510635
Immunogen	Recombinant human full-length IGHG4
Cellular localization	Cytoplasmic
Species reactivity	Human
Applications	Immunofluorescence, Immunohistology (formalin), Flow cytometry, Western
Application notes	Immunohistology (formalin) 0.5-1 ug/mL. Staining of formalin-fixed tissues is enhanced by boiling tissue sections in 10 mM Tris, 1 mM EDTA pH 9.0 for 10-20 min followed by cooling at RT for 20 min, Immunofluorescence 0.5-1 ug/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1 ug/mL. Optimal dilution for a specific application should be determined by user
Positive control	Tonsil
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Research areas	Immunology

Antibody #	Conjugation	Ex/Em	Concentration	Storage Buffer
BNC04	CF®405S	404/431 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC05	CF®405M	408/452 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC88	CF®488A	490/515 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC43	CF®543	541/560 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC55	CF®555	555/565 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC68	CF®568	562/583 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC94	CF®594	593/614 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC40	CF®640R	642/662 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC47	CF®647	650/665 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC61	CF®660R	663/682 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC80	CF®680	681/698 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC81	CF®680R	680/701 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNC70	CF®770	770/797 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCR	R-PE (PE)	496, 546, 565/578 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCA	APC	650/660 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCP	PerCP	482/677 nm	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCB	Biotin	N/A	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCAP	Alkaline Phosphatase	N/A	0.1 mg/mL	PBS, 0.1% BSA, 0.05% azide
BNCH	Horse radish Peroxidase	N/A	0.1 mg/mL	PBS, 0.05% BSA, no azide
BNUB	Purified, with BSA	N/A	0.2 mg/mL	PBS, 0.05% BSA, 0.05% azide
BNUM	Purified, BSA-free	N/A	1 mg/mL	PBS, no BSA, no azide