

<b>Description</b>	<b>Biotin-conjugated purified monoclonal mouse antibody to human IgG4, subclass specific</b>	
<b>Product code</b>	MAHu/IgG4/Bio	
<b>Biological origin</b>	Mouse, clone NI 315 (HP 6206)	
<b>Mouse isotype</b>	IgG1 $\kappa$	
<b>Physical form</b>	Purified monoclonal mouse IgG1 $\kappa$ conjugated with biotin, lyophilized from a solution in phosphate buffered saline (pH7.2).	
<b>Preservative</b>	No preservative added, as it may interfere with the antibody activity. No foreign protein added.	
<b>Immunogen</b>	Highly purified monoclonal IgG4 isolated from pooled human serum.	
<b>Identity &amp; Specificity</b>	The reactivity of the antiserum is restricted to a subclass specific determinant on the pFc portion of the IgG4 molecule as tested in direct binding enzyme immunoassay, immunoblotting, immunoprecipitation and direct immunoperoxidase staining of cytoplasmic Ig.	
<b>Cross-reactivity</b>	The antiserum does not react with any other component of the human Ig system or any other human plasma protein as tested. This antiserum has not been tested for cross-reactivity with other species.	
<b>Protein concentration</b>	IgG concentration is 0.4 mg/ml. Biotin/IgG protein molar ratio (B/P) approximately 4.8. No foreign proteins added.	
<b>Marker</b>	N-Hydroxysuccinimidobiotin.	
<b>Conjugation procedure</b>	Conjugation is carried out using a proprietary technique for the coupling of biotin, followed by several purification steps. After each step activity and specificity are tested in a variety of techniques. No foreign protein has been added. The conjugate is lyophilized to assure stability and long shelf life.	
<b>Intended use</b>	To identify the presence of IgG4 in human serum, other body fluids, cell and tissue substrates and to determine its concentration in techniques as ELISA, immunoperoxidase staining of cytoplasmic IgG4, and immunoblotting. As a second step an avidin or streptavidin conjugate of the customer's choice have to be used. The optimum working dilution is an assay-related characteristic. It may vary widely and should always be determined by titration. For histochemical use optimum dilutions are mostly from 1:50 to 250; in ELISA from 1:100 upwards; in Western blotting from 1:500 upwards. Working dilutions may vary widely, strongly depending on the test conditions. These data should be interpreted as general recommendations only.	
<b>Handling</b>	The lyophilized product is shipped at ambient temperature and may be stored at +4°C; prolonged storage at or below -20°C. Reconstitute the lyophilized product by adding 0.5 ml sterile distilled water. Dilutions may be prepared by adding phosphate buffered saline (PBS, pH 7.2). Avoid repeated thawing and freezing. If a slight precipitation occurs upon storage, this should be removed by centrifugation and will not affect the performance of the product. Diluted solutions should be stored at +4°C, not refrozen, and preferably used the same day.	
<b>Packing</b>	Vial with 0.5 ml lyophilized immunoconjugate.	
<b>Storage / shelf life</b>	Lyophilized at +4°C	at least 10 years
	reconstituted at or below -20°C	3-5 years
	reconstituted at +4°C	7 days
<b>Caution</b>	This immunoconjugate should be handled by qualified persons only and appropriate precautions should be taken in its handling and disposal, and of all associated materials. For <i>in vitro</i> research purposes only.	
<b>Reference</b>	Evaluation of monoclonal antibodies having specificity for human IgG subclasses: Results of an IUIS/WHO collaborative study. Immunology Letters <b>10</b> (1985), 223-252. Jefferis R, Reimer C B, Skavril F, de Lange G, Ling N R, Lowe L, Walker M R, Philips D J, Aloisio C H, Wells T W, Vaerman J, Magnusson C G, Kubagawa H, Cooper M, Vartdal F, Vandvik B, Haaijman J J, Makela O, Sarnesto A, Lando Z, Gergely J, Rainvölgyi E, László G, Radl J and Molinaro G A.	

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