

Description	Horseradish peroxidase–conjugated IgG fraction of polyclonal rabbit antiserum to rat IgG, heavy and light chains																		
Product code	RARa/IgG(H+L)/PO																		
Biological origin	Rabbit																		
Physical form	Peroxidase-coupled purified hyperimmune rabbit IgG lyophilized from a solution in phosphate buffered saline (PBS, pH 7.2).																		
Preservative	No preservative added, as it may interfere with the antibody activity.																		
Immunogen	Purified normal IgG isolated from pooled rat serum. Freund's complete adjuvant is used in the first step of the immunization procedure.																		
Purification	Hyperimmune antisera with strong precipitating activity are selected for fractionation by salt-precipitation and purification of the IgG fraction by DEAE-chromatography.																		
Adsorption	No adsorption required.																		
Identity & Specificity	The reactivity of the antiserum is directed to the Fc and Fab subunits of the IgG molecule. It includes a certain degree of reactivity with other immunoglobulins via the common Fab portion. It does not react with any non-Ig protein in rat serum, as tested by immunoelectrophoresis and double radial immunodiffusion.																		
Cross-reactivity	<p>Inter-species cross-reactivity is a normal feature of antibodies to immunoglobulins, since Ig of different species frequently share antigenic determinants. Cross-reactivity of this antiserum has been tested in double radial immunodiffusion with the following results:</p> <table border="0"> <tr> <td>bovine +</td> <td>dog ±</td> <td>goat +</td> <td>horse +</td> <td>monkey +</td> <td>swine +</td> </tr> <tr> <td>cat ±</td> <td>duck -</td> <td>guinea pig +</td> <td>human ±</td> <td>pigeon -</td> <td>turkey -</td> </tr> <tr> <td>chicken -</td> <td>ferret +</td> <td>hamster +</td> <td>mouse +</td> <td>sheep +</td> <td></td> </tr> </table> <p>A negative cross-reaction in double radial immunodiffusion does not exclude some reaction in more sensitive techniques.</p>	bovine +	dog ±	goat +	horse +	monkey +	swine +	cat ±	duck -	guinea pig +	human ±	pigeon -	turkey -	chicken -	ferret +	hamster +	mouse +	sheep +	
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Physicochemical characteristics	IgG protein concentration 10 mg/ml. Enzyme/IgG protein molar ratio (E/P) is approximately 1.5. No foreign proteins added.																		
Enzyme marker	Horseradish peroxidase enriched for isoenzyme C (RZ = 3.2).																		
Conjugation procedure	Conjugation is carried out using a proprietary modification of the periodate method, 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.																		
Intended use	<p>In enzyme-immunocytochemical and immunohistochemical staining for the detection of IgG, antigen or antibody, of appropriately treated cell and tissue substrates at the cellular and subcellular level. In non-isotopic assay methodology (e.g. ELISA) to identify and measure a specific IgG in rat serum or other body fluid. In electron microscopy, since the complex between the conjugated antibody and the antigen also has electron-dense properties.</p> <p><i>This immunoconjugate is not pre-diluted. The optimum working dilution of each conjugate should be established by titration before being used. Excess labelled antibody must be avoided because it may cause high unspecific background staining and interfere with the specific signal.</i></p> <p>Working dilutions for histochemical and cytochemical use are usually between 1:100 and 1:250; in ELISA and comparable non-precipitating antibody-binding assays between 1:500 and 1:5,000.</p>																		
Handling	The lyophilized conjugate is shipped at ambient temperature and may be stored at +4°C; prolonged storage at or below -20°C. It is reconstituted by adding 1 ml sterile distilled water, spun down to remove insoluble particles, divided into small aliquots, frozen and stored at or below -20°C. Prior to use, an aliquot is thawed slowly at ambient temperature, spun down again and used to prepare working dilutions by adding sterile phosphate buffered saline (PBS, pH 7.2). Repeated thawing and freezing should be avoided. Working dilutions should be stored at +4°C, not refrozen, and preferably used the same day. If a slight precipitation occurs upon storage, this should be removed by centrifugation. It will not affect the performance of the immunoconjugate.																		
Packing	Vial with 1 ml lyophilized immunoconjugate.																		
Storage / shelf life	<table border="0"> <tr> <td>Lyophilized at +4°C</td> <td>at least 10 years</td> </tr> <tr> <td>reconstituted at or below -20°C</td> <td>3-5 years</td> </tr> <tr> <td>reconstituted at +4°C</td> <td>7 days</td> </tr> </table>	Lyophilized at +4°C	at least 10 years	reconstituted at or below -20°C	3-5 years	reconstituted at +4°C	7 days												
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Caution	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> laboratory research purposes only.																		

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