

Description	Biotin-conjugated IgG fraction of polyclonal sheep antiserum to rat Fab of IgG	
Product code	ShARa/Fab/Bio	
Biological origin	Sheep	
Physical form	Biotin-coupled purified hyperimmune sheep IgG lyophilized from a solution in phosphate buffered saline (PBS, pH 7.2).	
Preservative	No preservative added.	
Immunogen	Purified Fab from 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	Immunoaffinity adsorbed using insolubilized antigens as required to eliminate antibodies reacting with other subunits of the immunoglobulin or reacting with other serum proteins. The use of insolubilized adsorption antigens prevents the presence of foreign protein or immune complexes in the antiserum.	
Identity & Specificity	The antiserum is reacting with the Fab subunit of intact IgG, IgA and IgM and other Ig classes of both light chain types, with their Fab or F(ab') ₂ subunits and with free light chains of kappa and lambda type as tested in immunoelectrophoresis and double radial immunodiffusion.	
Cross-reactivity	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 not been tested in detail.	
Physicochemical characteristics	IgG protein concentration 10 mg/ml. Biotin/IgG protein molar ratio (B/P) is approximately 6.2. No foreign proteins added.	
Marker	N-Hydroxysuccinimidobiotin.	
Conjugation procedure	A proprietary technique for the binding to biotin is used, followed by several purification steps. After each step activity and specificity are tested in a variety of techniques. The conjugate is lyophilized to assure stability and long shelf life.	
Intended use	<p>In immunocytochemical and immunohistochemical staining to identify and measure free or Ig bound subunits of both kappa and lambda type at the cellular and subcellular level by staining of appropriately treated cell and tissue substrates, and to demonstrate circulating antibodies in serodiagnostic microbiology and auto-immune diseases; to identify a specific antigen or immune complex using a reference antibody of rat origin in the middle layer of the indirect test procedure. As a second step an avidin or streptavidin conjugate of the user's choice has to be used.</p> <p>In general this kind of products is not recommended as direct or indirect screening reagents for immunoglobulin isotypes on the surface of membranes of vital lymphoid cells. The presence of activity to the common Fab subunit may result in the staining of Ig bound to Fc-receptors on non-lymphoid cells. Combinations of isotype-specific reagents should be used instead for this purpose.</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 1:500; in ELISA and comparable non-precipitating antibody-binding assays between 1:1,000 and 1:10,000.</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 in the dark 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	Lyophilized at +4°C	at least 10 years
	reconstituted at or below -20°C	3-5 years
	reconstituted at +4°C	7 days
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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