

Description	Tetramethylrhodamine isothiocyanate-conjugated IgG fraction of polyclonal rabbit antiserum to human alpha-lactalbumin	
Product code	RAHu/ALab/TRITC	
Biological origin	Rabbit	
Physical form	TRITC-coupled purified hyperimmune rabbit IgG lyophilized from a solution in phosphate buffered saline (PBS, pH 7.2).	
Preservative	No preservative added.	
Immunogen	Highly purified alpha-lactalbumin isolated from human milk. Alpha-lactalbumin is one of the major proteins in the alpha region after immunoelectrophoresis of human milk. It has been implicated as a component of the enzyme lactose synthetase which catalyzes the formation of lactose from uridine diphosphate galactose and glucose. 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 serum proteins. The use of insolubilized adsorption antigens prevents the presence of excess adsorbent protein or immune complexes in the antiserum.	
Identity & Specificity	The defined antibody specificity is directed to alpha-lactalbumin as tested against human milk. Its presence can also be demonstrated in udder tissues. When tested in immunoelectrophoresis and double radial immunodiffusion against serum no reaction is obtained.	
Cross-reactivity	Homologous proteins of different species frequently share antigenic determinants. The degree of cross-reactivity is also dependent on the concentrations of the reactants and the sensitivity of the assay arrangement. This antiserum has not been tested for cross-reactivity.	
Physicochemical characteristics	IgG protein concentration 10 mg/ml. Fluorochrome/IgG protein molar ratio (F/P) is approximately 3.3. No foreign proteins added.	
Fluorescent marker	Tetramethylrhodamine isothiocyanate isomer R. It has an orange-red fluorescence. Excitation: 554 nm, emission: 573 nm. To avoid nonspecific background staining, specially synthesized and exceptionally pure crystalline isomer R has been used instead of the usual racemic mixture. Although its fluorescence efficiency is less than of FITC, TRITC conjugates have the advantage of significantly less photo bleaching. This facilitates their use in quantitative cell-counting procedures.	
Conjugation procedure	A proprietary technique for the binding to TRITC is used, followed by several purification steps to remove free reactants and protein aggregates. 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	To identify and measure IgG, antigen or antibody, at the cellular and subcellular level by immunofluorescence staining of appropriately treated cell and tissue substrates, and to demonstrate circulating antibodies in serodiagnostic microbiology and autoimmune diseases; to identify a specific antigen or immune complex using a reference antibody of horse origin in the middle layer of the indirect test procedure. <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> Working dilutions are usually between 1:10 and 1:50.	
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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