

Description	Fluorescein isothiocyanate-conjugated IgG fraction of polyclonal rabbit antiserum to human alpha-foetoprotein	
Product code	RAHu/AFP/FITC	
Biological origin	Rabbit	
Physical form	FITC-coupled purified hyperimmune rabbit IgG lyophilized from a solution in phosphate buffered saline (PBS, pH 7.2).	
Preservative	No preservative added	
Immunogen	Purified human alpha-foetoprotein is isolated from pooled amniotic fluid and hepatoma serum, using a proprietary multiple step method. Several foetoproteins have been demonstrated in human foetal serum and amniotic fluid. One of the best studied is the alpha-foetoprotein. It can easily be identified immunochemically because of its distinct antigenicity. In electrophoresis its relative mobility is between the albumin and alpha-1 globulin fractions. Its molecular weight is 64,000, the carbohydrate content is relatively low. The concentration of alpha-foetoprotein gradually decreases during foetal growth. It is not found in normal adult serum, but reappears in most human developing hepatoma. In pooled foetal/newborn serum a concentration of 1 mg/ml has been measured. 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 human serum proteins. The use of insolubilized adsorption antigens prevents the presence of excess adsorbent protein or immune complexes in the antiserum.	
Identity & Specificity	The reactivity of the antiserum is restricted to alpha-foetoprotein. In immunoelectrophoresis and radial immunodiffusion, using various antiserum concentrations against amniotic fluid, hepatoma sera and purified alpha-foetoprotein a single precipitin line is obtained. No precipitation reaction is obtained with normal human serum.	
Cross-reactivity	The antiserum does not cross react with any other human plasma proteins as tested in gel-diffusion techniques. Inter-species cross reactivity is a normal feature of antibodies to mammalian serum proteins, since homologous proteins 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. Fluorochrome/IgG protein molar ratio (F/P) is approximately 1.5. No foreign proteins added.	
Fluorescent marker	Fluorescein isothiocyanate isomer 1. Excitation: 492 nm, emission: 515 nm.	
Conjugation procedure	A proprietary technique for the binding to FITC 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 alpha foetoprotein at the cellular and subcellular level by immunofluorescence staining of appropriately treated cell and tissue substrates, 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. Working dilutions are usually between 1:20 and 1:80.	
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.	

NORDIC IMMUNOLOGICAL LABORATORIES
 Langendijk 25, 5652 AX Eindhoven, The Netherlands
 Tel. +31 630 070 625, Fax: +31 402 920 069
 E-mail: info@nordiclabs.nl
 www.nordiclabs.nl