Description	**Tetramethylrhodamine isothiocyanate-conjugated F(ab')2 fragments of polyclonal goat IgG antibodies to human IgM, Fc specific**
Product code	FGAHu/IgM(Fc)/TRITC
Biological origin	Goat
Physical form	TRITC-coupled goat F(ab')2 antibodies lyophilized from a solution in phosphate buffered saline (PBS, pH 7.2).
Preservative	No preservative added.
Immunogen	Purified IgM prepared from pooled human 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 cross-reacting with other components of the immunoglobulin system or reacting with other serum proteins. Special attention is given to the removal of antibodies to common Ig/Fab. The use of insolubilized adsorption antigens prevents the presence of excess adsorbent protein or immune complexes in the antiserum.
Identity & Specificity	The antiserum is reacting with to the Fc subunits of IgM. It does not react with other immunoglobulins or any non-Ig protein in human serum, as tested by 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 conjugate has not been tested in detail.
Physicochemical characteristics	IgG protein concentration 4.7 mg/ml. Fluorochrome/IgG protein molar ratio (F/P) is approximately 2.7. 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	Direct staining of fixed cell and tissue substrates, to demonstrate the intracellular presence of IgM. The absence of the Fc domain in the conjugate ensures minimal interaction with the tissue components and cell surfaces other than the primary antibody activity. This conjugate is primarily intended for use in cell surface membrane staining procedures, to identify and quantitate Ig on B cells, especially if interference by Fc activity is expected.. *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 1:10 and 1:40.
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 *in vitro* 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

© Nordic Immunological Laboratories 2004