

DELFIA[®] Eu-labelled Anti-Human IgG 1244-330

INTENDED USE

DELFIA[®] Eu-Labelled Anti-Human IgG is intended for use as a secondary antibody in various types of immunoassay based on solid-phase separation (1,2,3). The label, Eu³⁺, is measured using dissociation-enhanced time-resolved fluorometry (4,5).

PACKAGE CONTENTS

The expiry date is stated on the vial label. Store at +2 - +8°C.

Eu-Labelled Anti-Human IgG is supplied as 2.0 mL of ready for use solution in 50 mmol/L Tris-HCl buffered saline, pH 7.8, containing 0.1 % highly purified bovine serum albumin (BSA), and < 0.1 % sodium azide as preservative.

The labelling yield is about 13 Eu³⁺/IgG. IgG concentration is 50 µg/mL.

PRODUCT DESCRIPTION

The product consists of high affinity mouse anti-human IgG monoclonal antibodies labelled with the Eu-chelate of N¹-(p-isothiocyanatobenzyl)-diethylenetriamine-N¹,N²,N³,N³-tetraacetic acid.

The *in vitro* produced and affinity purified mouse monoclonal IgG_{2b} (clone HP6043) antibodies are specific for the Fc-part of human IgG. The antibodies recognize all IgG subclasses and cross-react only with rabbit immunoglobulins (6,7 and Table 1).

Human Antigens	Reactivity	Animal Antigens	Reactivity
IgG ₁	+++	Rabbit IgG	+++
IgG ₂	+++	Mouse IgG	-
IgG ₃	+	Goat IgG	-
IgG ₄	+++	Sheep IgG	-
IgG F _{ab}	-	Horse IgG	-
IgG F _{(ab)2}	-		
IgM	-		
IgA	-		
IgE	-		
IgD	-		

+++ strong binding
+ weak binding
- no binding

Table 1. Reactivity of Eu-Labelled Anti-Human IgG.

DELFIA is a registered trademark of Wallac Oy.

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PRODUCT USE

The immunoassay is carried out in microtitration strips (1244-550).

The labelled antibodies are diluted in DELFIA Assay Buffer (prod. no. 1244-106) within one hour of use. A final concentration of 100 ng/mL (1:500 dilution) may serve as a guideline. For best results it is recommended that the optimal working dilution and assay conditions be determined separately for each assay.

After the immunoreaction, the strips should be washed several times with diluted DELFIA Wash Concentrate (prod. no. B117-100).

Eu-Labelled Anti-Human IgG itself is practically non-fluorescent. After the reaction and washing steps, Eu^{3+} is efficiently released from the chelate within a few minutes by the low pH of the DELFIA Enhancement Solution (prod. no. 1244-104 or 1244-105) (200 μL /well; five minutes on a plateshaker). Free Eu^{3+} rapidly forms a new highly fluorescent chelate with the components of the Enhancement Solution. The fluorescence is then measured with a time-resolved fluorometer.

WARNINGS AND PRECAUTIONS

The product contains sodium azide (NaN_3) as a preservative. Sodium azide may react with lead and copper plumbing to form highly explosive metal azides. On disposal, flush with a large volume of water to prevent azide build-up.

Disposal of all waste should be in accordance with local regulations.

WARRANTY

The reagent is covered by patents on both the chemical structure (8) and use in DELFIA-type assays (9). Purchase of this reagent gives the purchaser the right to use this material in his own research. Further distribution of this reagent is expressly prohibited. Purchase of this product implies agreement with these conditions of sale.

REFERENCES

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