Product specification

Anti-mouse Ig, fluorescein linked whole antibody (from sheep)
N 1031
Anti-rabbit Ig, fluorescein linked whole antibody (from donkey)
N 1034

Safety warnings and precautions

Warning: For research use only. Not recommended or intended for diagnosis of disease in humans or animals.

We recommend that this product and components are handled only by those persons who have been trained in laboratory techniques and that it is used in accordance with the principles of good laboratory practice. As all chemicals should be considered potentially hazardous, it is advisable when handling chemical reagents to wear suitable protective clothing, such as laboratory overalls, safety glasses and gloves. Care should be taken to avoid contact with skin or eyes. In case of contact with skin or eyes, wash immediately with water.

Warning: Contains sodium azide in dilute solution.
Dispose of waste by flushing with copious amounts of water to avoid the build up of explosive metallic azides in copper and lead plumbing. The total azide present in each pack is 0.5mg.

Purification to ensure species-specificity

The unlabelled antibody is prepared by hyper-immunizing sheep or donkey with purified immunoglobulin fractions from normal serum to ensure high affinity antibodies.

The pooled antiserum is then affinity adsorbed to remove cross-reacting antibodies towards the appropriate rat, mouse, human or rabbit immunoglobulins. These activities are thoroughly depleted to ensure species-specificity.

Finally, to select for specific binding to Ig of the required species, the second antibodies are affinity purified on columns of the appropriate species' Ig. After washing to remove any remaining non-specific serum components and low affinity antibodies, the species-specific second antibodies are eluted using carefully selected, mild conditions which minimize aggregation and preserve immunological activity, yet which will elute high affinity antibodies.

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Preparation of labelled antibody

The labelled antibody is prepared using the isothiocyanate derivative of fluorescein. Excess labelling reagent is removed by gel filtration and the conjugate is purified by ion exchange chromatography to ensure bright specific staining with low non-specific backgrounds.

The labelled antibody has been rigorously tested in immunofluorescence staining of cells and cryostat sections of lymphoid tissue to demonstrate the high signal-to-noise ratio that can be achieved with species-specific reagents. Based on these studies, one pack of labelled antibody is sufficient to stain approximately 500-1000 slides.

Storage and stability

Store at 2-8°C in the dark. Avoid freeze-thaw cycles. Under these conditions the product is stable for at least 4 months from time of opening.

Packaging

The fluorescein labelled antibody is supplied in phosphate buffered saline, pH7.5, containing 1%(w/v) bovine serum albumin and 0.05%(w/v) sodium azide (total volume 1ml) in a type P87 vial.

Use

Fluorescein labelled species-specific second antibody can be used to detect immunoglobulins or antibody-antigen complexes. The most widely used techniques are immunofluorescence staining[1] and fluorescence activated cell sorting[2]. The excitation and emission maxima of conjugated fluorescein are 492 and 517nm respectively.

The optimum dilution of conjugate should be determined for each particular application. Dilutions in the range 1:10 to 1:50 are suitable for most applications.

References

1) *Immunocytochemistry* 2nd Edition, Edited by L.A. Sternberger, J. Wiley and Sons N.Y., 1979.
2) PARKS, D.R., HARDY, R.R. and HERZENBERG, L.A., *Immunology Today*, **4**, pp.145-150, 1983.

Related products

Mouse Ig, Texas Red™ linked whole antibody (from sheep)	N 2031
Rabbit Ig, Texas Red linked whole antibody (from donkey)	N 2034
Mouse Ig, biotinylated whole antibody (from sheep)	RPN 1001
Rat Ig, biotinylated whole antibody (from goat)	RPN 1005
Human Ig, biotinylated whole antibody (from sheep)	RPN 1003
Rabbit Ig, biotinylated whole antibody (from donkey)	RPN 1004
Streptavidin alkaline phosphatase conjugate	RPN 1234
Streptavidin biotinylated horseradish peroxidase complex	RPN 1051
Streptavidin horseradish peroxidase conjugate	RPN 1231
Streptavidin fluorescein	RPN 1232
Streptavidin Texas Red	RPN 1233
Mouse IgG, horseradish peroxidase linked whole antibody (from sheep)	NA 931
Rabbit IgG, horseradish peroxidase linked whole antibody (from donkey)	NA 934
Rat IgG, horseradish peroxidase linked whole antibody (from goat)	NA 935
Human IgG, horseradish peroxidase linked whole antibody (from sheep)	NA 933
Mouse IgG, horseradish peroxidase linked $F(Ab')_2$ fragment (from sheep)	NA 9310
Rabbit IgG, horseradish peroxidase linked $F(Ab')_2$ fragment (from donkey)	NA 9340
Rat IgG, horseradish peroxidase linked $F(Ab')_2$ fragment (from goat)	NA 9350

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