# Product specification

Anti-mouse Ig, Texas Red linked whole antibody (from sheep)

N 2031

# Anti-rabbit Ig, Texas Red linked whole antibody (from donkey) N 2034

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 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 piping. The total azide content 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 mouse 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 coupled to Sepharose<sup>TM</sup>. After washing to remove any 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.



Preparation of labelled antibody

The labelled antibody is prepared using Texas Red<sup>TM</sup>. 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 Texas Red 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 Duoseal vial, type P87.

#### Use

Texas Red labelled species-specific second antibodies can be used to detect immunoglobulins or antibody-antigen complexes. The most widely used techniques are immunofluorescence staining<sup>(1)</sup> and fluorescence activated cell sorting<sup>(1-3)</sup>. The excitation and emission maxima of conjugated Texas Red are 596 and 615nm respectively. Filter systems designed for use with rhodamine conjugates can also be successfully used with Texas Red.

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) TITUS, J.A. et al., J. Immunological Methods, 50, pp.193-204, 1982.
- 2) HARDY, R.R. et al., Nature, 297, pp.589-591, 1982.
- 3) PARKS, D.D., HARDY, R.R. and HERZENBERG, L.A., *Immunology Today*, 4, pp.145-150, 1983.

## Related products

Mouse Ig, fluorescein linked whole antibody (from sheep) Rabbit Ig, fluorescein linked whole antibody (from donkey) Mouse Ig, biotinylated whole antibody (from sheep) Rat Ig, biotinylated whole antibody (from sheep) Human Ig, biotinylated whole antibody (from sheep) Rabbit Ig, biotinylated whole antibody (from donkey) Streptavidin alkaline phosphatase conjugate Streptavidin biotinylated horseradish peroxidase complex Streptavidin horseradish peroxidase conjugate Streptavidin Fluorescein Streptavidin Texas Red Mouse IgG, horseradish peroxidase linked whole antibody (from sheep) Rabbit IgG, horseradish peroxidase linked whole antibody (from goat) Human IgG, horseradish peroxidase linked whole antibody (from sheep) Mouse IgG, horseradish peroxidase linked F(Ab') fragment (from sheep) Rabbit IgG, horseradish peroxidase linked F(Ab') fragment (from donkey)	N 1031 N 1034 RPN 1001 RPN 1005 RPN 1003 RPN 1004 RPN 1234 RPN 1251 RPN 1231 RPN 1232 RPN 1233 NA 931 NA 935 NA 935 NA 9310 NA 9340
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Rabbit IgG, horseradish peroxidase linked F(Ab') <sub>2</sub> fragment (from donkey) Rat IgG, horseradish peroxidsae linked F(Ab') <sub>2</sub> fragment (from goat)	NA 9340 NA 9350

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