

Product Information

Anti-Mouse IgG (Fc Specific)-Peroxidase

Antibody Produced in Goat

Affinity Isolated Antibody, Buffered Aqueous Solution

A2554

Product Description

Antiserum is produced in goat using purified mouse IgG, Fc fragment, as the immunogen. Antibody is isolated from Anti-Mouse IgG antiserum by immunospecific purification to remove essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to the Fc fragment of mouse IgG. Anti-Mouse IgG is conjugated to peroxidase by protein cross linking with 0.2% glutaraldehyde. The antibody preparation is solid phase adsorbed with human serum proteins to ensure minimal cross reactivity in tissue or cell preparations. Solid phase adsorption with bovine and horse serum proteins ensures minimal cross reactivity with horse or fetal calf serum in hybridoma media.

Specificity of the Anti-Mouse IgG (Fc specific)-Peroxidase is determined by enzyme linked immunosorbent assay (ELISA). The conjugate is specific for mouse IgG and mouse IgG, Fc fragment. Cross reactivity of the antibody-conjugate is also determined by ELISA. The conjugate shows no reactivity with mouse Fab fragment, human IgG, IgA, IgM, kappa and lambda light chain, bovine IgG and IgM, or horse IgG.

Identity and purity of the antibody is established by immunoelectrophoresis (IEP) prior to conjugation. Electrophoresis of the antibody preparation followed by diffusion versus anti-goat IgG and anti-goat whole serum result in single arcs of precipitation.

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 0.01% MIT as a preservative.

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage

For continuous use, store at 2-8 °C for up to one month. For extended storage, the solution may be frozen in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Product Profile

Molar Ratio (Antibody: Peroxidase): 0.6 - 1.5

This goat antiserum was maintained at pH 5.0 for 40 minutes to meet USDA requirements.

Titers

Direct ELISA:

Minimum 1:70,000

We are now reporting lot specific information as a titer by direct ELISA rather than as a working dilution (see below). Titer is defined as the dilution of conjugate sufficient to give a change in absorbance of 1.0 at 450 nm after 30 minutes of substrate conversion at 25 °C¹. Microtiter plates are coated with purified mouse IgG at a concentration of 5 µg/mL in 0.05 M carbonate-bicarbonate buffer, pH 9.6.

Carbonate-Bicarbonate Buffer capsules
(Cat. No. C3041)

Substrate: *o*-Phenylenediamine dihydrochloride (OPD), Cat. No. P8287, 0.4 mg/mL in 0.05 M phosphate-citrate buffer, pH 5.0 containing 0.03% sodium perborate.

Phosphate-Citrate Buffer with Sodium Perborate, capsules (Cat. No. P4922).

Immunoblotting

A working dilution of 1:80,000-1:160,000 is determined using immunoblot assay detecting β-Actin in total cell extract of HeLa cells (5-10 µg per well)

Immunohistochemistry

A minimum dilution of 1:200 was determined in an indirect assay using formalin-fixed, paraffin-embedded human tonsil and Monoclonal Anti-Human IgG, as the primary antibody.

Note: Working dilutions should be determined by titration assay. Due to differences in assay systems, these titers may not reflect the user's actual working dilution.

Reference

1. Voller, A., et al., Bulletin WHO, **53**: 55 (1976).

Notice

We provide information and advice to our customers on application technologies and regulatory matters to the best of our knowledge and ability, but without obligation or liability. Existing laws and regulations are to be observed in all cases by our customers. This also applies in respect to any rights of third parties. Our information and advice do not relieve our customers of their own responsibility for checking the suitability of our products for the envisaged purpose.

The information in this document is subject to change without notice and should not be construed as a commitment by the manufacturing or selling entity, or an affiliate. We assume no responsibility for any errors that may appear in this document.

Technical Assistance

Visit the tech service page at SigmaAldrich.com/techservice.

Standard Warranty

The applicable warranty for the products listed in this publication may be found at SigmaAldrich.com/terms.

Contact Information

For the location of the office nearest you, go to SigmaAldrich.com/offices.

The life science business of Merck operates as MilliporeSigma in the U.S. and Canada.

Merck and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources.
© 2022 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.