3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

Anti-Mouse IgG (Fc Specific)-Peroxidase produced in goat, affinity isolated antibody adsorbed with human IgG

Catalog Number A0168

Product Description

Antiserum is produced in goat using purified mouse IgG Fc fragment as the immunogen. Antibody is isolated from goat anti-mouse IgG antiserum by immunospecific purification to remove essentially all goat serum proteins, including immunoglobulins, that 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 IgG to ensure minimal cross reactivity in tissue or cell preparations.

Specificity of Anti-Mouse IgG (Fc Specific)-Peroxidase is determined by 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 or human 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 results in single arcs of precipitation.

Reagents

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 0.05% MIT as a preservative.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for a maximum of 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

IgG concentration: 4-11 mg/ml

Molar Ratio (Antibody:Peroxidase): 0.6-1.5

Direct ELISA: minimum 1:50,000

We are now reporting lot specific information as a titer by direct ELISA rather than as a working dilution. 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 °C.1

Microtiter plates are coated with purified mouse IgG at a concentration of 5 μ g/ml in 0.05 M carbonate-bicarbonate buffer, pH 9.6.

Carbonate-Bicarbonate Buffer capsules are available as Catalog Number C3041.

Substrate: *o*-Phenylenediamine Dihydrochloride (OPD), Catalog Number 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 are available as Catalog Number P4922.

Immunoblotting: a working dilution of 1:80.000 - 1:160,000 is determined using immunoblot assay detecting \(\mathcal{B}\)-Actin in total cell extract of HeLa cells (5-10 ug per well)

Immunohistology: a minimum dilution of 1:100 was determined by an indirect assay using formalin-fixed, paraffin-embedded human tonsil and Monoclonal Anti-Human IgG, Catalog Number I5885, 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 World Health Organ. **53**, 55 (1976).

TT 2/2020