

Product Information

Anti-Goat/Sheep IgG–Alkaline Phosphatase antibody, Mouse monoclonal
clone GT-34, purified from hybridoma cell culture

Catalog Number **A8062**

Product Description

Monoclonal Anti-Goat/Sheep IgG-Alkaline Phosphatase (mouse IgG1 isotype) is derived from the GT-34 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from an immunized mouse. Purified goat IgG was used as the immunogen. The isotype is determined by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents, Catalog number ISO2. The immunoglobulin fraction of the ascites fluid is conjugated to alkaline phosphatase using 0.2% glutaraldehyde.

Monoclonal Anti-Goat/Sheep IgG-Alkaline Phosphatase recognizes an epitope on the heavy chain of both goat IgG1 and IgG2. The antibody shows strong cross-reactivity with sheep IgG. No cross-reactivity is observed with human IgG or IgG derived from the following species: guinea pig, rat, horse, dog, chicken, pig, mouse, rabbit, or cat.

Monoclonal Anti-Goat/Sheep IgG-Alkaline Phosphatase may be used in direct or indirect immunohistological assays offering sensitivity and specificity for detection and localization of goat IgG. Primary antibodies developed in goats are widely used in various assay techniques by both researchers and clinicians. Secondary antibodies may suffer from a lack of species specificity for the primary goat IgG. In many instances such antibodies also recognize non-related immunoglobulins that appear in the preparation being tested resulting in increased levels of background staining. To resolve this, an extensive adsorbing stage must be incorporated into the manufacturing process. Monoclonal Anti-Goat/Sheep IgG-Alkaline Phosphatase, which does not recognize human or any other species immunoglobulins, can serve as an essential tool especially when used as a secondary reagent in immunohistochemistry.

Reagent

Supplied as a liquid in 0.05 M Tris buffer, pH 8.0, containing 1% BSA, 1.0 mM MgCl₂, 50% glycerol, and 15 mM sodium azide.

Precautions and Disclaimer

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

Store at 2-8 °C. Discard diluted product if not used within 12 hours.

Product Profile

Direct ELISA: titer: 1:50,000

The titer of the conjugate in enzyme immunoassay is determined by testing serial dilutions in microtiter plates coated with goat IgG at 5 µg/ml. The titer is defined as the dilution of product which gives an absorbance of 1.0 at 405 nm following 30 minutes of enzymatic reaction.

Immunoblotting: a minimum working dilution of 1:150,000 is determined using immunoblot assay detecting filamin in total cell extract of chicken fibroblasts (10-20 µg per well)

Immunohistochemistry: a minimum dilution of 1:40 was determined in an indirect assay using formalin-fixed, paraffin-embedded sections of human tonsil and Anti-Human IgG, Catalog Number I1011, as the primary antibody.

References

1. Voller, A., et al., *Bulletin WHO*, **53**, 55 (1976).
2. Lamoyi, E., and Nisenhoff, A., *J. Immunol. Methods*, **56**, 235 (1983).

3. Schuurs, A., and Van Veeman, B., *Clinica Chimica Acta*, **81**, 1 (1977).
4. Dandliker, W., et al., *Biochemistry*, **6**, 1460 (1967).

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