Anti-Mouse IgG (Fab specific)–Biotin
antibody produced in goat, affinity isolated antibody,
adsorbed with human IgG and rat serum proteins

Catalog Number B0529

Product Description
Anti-Mouse IgG (Fab specific) is produced in goat using
as immunogen purified mouse IgG. Affinity isolated
antibody is obtained from goat anti-mouse antiserum by
immunospecific purification which removes essentially
all goat serum proteins, including immunoglobulins that
do not specifically bind to the Fab fragment of mouse
IgG. The antibody preparation is solid phase adsorbed
with human IgG and rat serum proteins to ensure
minimal cross reactivity in tissue or cell preparations.
Affinity purified antibodies are conjugated to biotin
ε-amino caproic acid-N-hydroxysuccinimide ester;
unconjugated material is removed by gel filtration.

This product is determined to be specific for the Fab
fragment of mouse IgG by immunoelectrophoresis, prior
to conjugation, using mouse IgG, the Fab fragment of
mouse IgG and the Fc fragment of mouse IgG. No
reactivity is observed with the Fc fragment of mouse
IgG, human IgG, IgA, IgM or rat IgG.

Reagent
Supplied as a solution in 0.01 M phosphate buffered
saline, pH 7.4, containing 15 mM sodium azide.

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

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
Store at 2-8 °C. For extended storage, freeze in
working aliquots at −20 °C. 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
Avidin, streptavidin or ExtrAvidin® show high affinity
interaction with biotin and this feature renders the
biotin-avidin system an extremely effective tool in
molecular biology, protein chemistry and immunology.
Because of the high specificity of the biotinylated
antibody to mouse Fab, the stability of the biotin-avidin
complex and the availability of a variety of secondary
reagents (avidin, streptavidin or ExtrAvidin conjugated
to FITC, TRITC, Peroxidase or Alkaline Phosphatase),
the detection and quantitation of mouse immunoglobulins
can be easily accomplished. The product may
be used as a reagent in immunohistological studies,
offering sensitive and specific activity for all mouse
immunoglobulin isotypes without cross reactivity with
human or rat immunoglobulins. Because of the minimal
interspecies cross reactivity to human and rat serum
proteins, this product is excellent for application in
enzyme immunoassays or dot blotting in the presence
of human or rat serum or plasma.

Direct ELISA: minimum 1:200,000. The working dilution
of the conjugate, for use as reagent in enzyme
immunoassay, is determined by testing dilutions of the
conjugate in microtiter plates coated with mouse IgG at
1 µg/ml. Using ExtrAvidin-Peroxidase, Catalog Number
E2886, at 2 µg/ml gives an absorbance value of 1.0 at
A_{450nm} following 30 minutes of substrate conversion.

Immunoblotting: a working dilution of 1:300,000 -
1:600,000 is determined while detecting β-Actin in total
cell extract of HeLa cells (5-10 ug per well).

Immunohistology: a minimum working dilution of 1:300
is determined by indirect assay using formalin-fixed,
paraffin-embedded human tonsils and Monoclonal Anti-
Human IgG, Catalog Number I5885, as the primary
antibody and ExtrAvidin-Peroxidase at 25 µg/ml.

ExtrAvidin is a registered trademark of Sigma-Aldrich LP.

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