

## Product Information

### Anti-Human IgG (Fc specific)-Biotin antibody, Mouse monoclonal clone HP-6017, purified from hybridoma cell culture

Catalog Number **B3773**

#### Product Description

Anti-Human IgG (Fc specific) antibody, Mouse monoclonal (mouse IgG2a isotype) is derived from the hybridoma produced by the fusion of mouse myeloma cells and splenocytes from an immunized mouse. Purified human IgG coupled to polyaminostyrene (PAS) beads 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 hybridoma cell culture conjugated to  $\epsilon$ -aminocaproyl biotin. This covalent coupling of biotin to the immunoglobulin allows for the binding of avidin and ExtrAvidin® bearing a variety of different labels.

Monoclonal Anti-Human IgG-Biotin reacts specifically with the human IgG (Fc fragment) by ELISA. The product is reactive with common epitopes of all IgG subclasses but does not react with human IgA, IgM, purified light chains or the Fab fragment of IgG. This clone has been evaluated for specificity using a wide range of immunological techniques in the IUIS/WHO collaborative study and has been adopted by IUIS/WHO study as a standard reagent.

Although the antibody site is located in the terminal end of the human IgG molecule (part of the Fab fragment), the Fc portion has various important functions such as complement fixation, site for rheumatoid factor (autoantibodies directed to Fc), passage through placental membrane and staphylococcus protein A binding. A certain population of the lymphocytes possesses the so called "Fc receptor", therefore specific immuno-reagents targeted only for the Fc fragment should prove useful.

#### Reagent

Supplied in 0.01 M phosphate buffered saline, pH 7.4, with 1% BSA and 15 mM sodium azide as a preservative.

#### Precautions

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 up to one month. For extended storage, solution may be frozen in working aliquots. Repeated freezing and thawing, or storage in "frost-freezers", is not recommended. If slight turbidity occurs upon prolonged storage, clarify by centrifugation before use.

#### Product Profile

Direct ELISA: a minimum working dilution of 1:80,000 is determined using human IgG at 1  $\mu$ g/ml as coat, with ExtrAvidin-Peroxidase and o-phenyldiamine dihydrochloride.

**Note:** In order to obtain best results, it is recommended that each individual user determine their optimum working dilutions by titration assay.

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DS,PHC 01/16-1