

## Technical Bulletin

# Anti-Human IgG (Fc specific) –FITC Antibody, Mouse Monoclonal

Clone HP-6017, purified from hybridoma cell culture

**F5016**

## Product Description

Monoclonal Anti-Human IgG (mouse IgG2a isotype) is derived from the hybridoma produced by the fusion of mouse myeloma cells and splenocytes from an immunized mouse.<sup>1</sup> Human IgG coupled to polyamino-styrene beads was used as the immunogen. The isotype is determined by a double diffusion assay using immunoglobulin and subclass specific antisera. The immunoglobulin fraction of the ascites fluid is conjugated to fluorescein isothiocyanate (FITC) and then further purified to remove unconjugated FITC.

Monoclonal Anti-Human IgG (Fc Specific)-FITC reacts specifically with the human IgG (Fc fragment), all subclasses. The antibody 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 as a standard reagent.<sup>2</sup>

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 "Fc receptor", therefore specific immunoreagents targeted only for the Fc fragment should prove useful.

## Reagent

Supplied as a liquid in 0.01 M phosphate buffer, pH 8.0, with 1% inactivated BSA and 15 mM sodium azide 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 a maximum of one month. For extended storage, 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 by centrifugation before use.

**Note:** Store product protected from light.

## Product Profile

F/P Molar Ratio: 3-5.

IgG Concentration (OD 280nm): 2.0-4.0 mg/mL  
[absorbance ( $E_{1\%}^{1\text{cm}}$ )]

### Fluorescent Dot Immunobinding Assay (F-DIBA):

Minimum 1:16 dilution of conjugate on a 4-8 µg dot of human IgG (Fc fragment).

### Particle Immunofluorescent Assay (F-IFMA):

Minimum 1:16 dilution of conjugate on 50 µL suspension of Human IgG-Agarose coated with ~20 µg human IgG.

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

## References

1. Reimer, C.B. et al., Hybridoma, 3, 263 (1984).
2. Jefferies, R., et al., Immunol. Lett., 10, 223 (1985).

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