

# Complement

## Monoclonal Antibodies: Murine Anti-Human Factor P (#2)

**For Research Use Only. Not for use in Diagnostic Procedures.**

### Background

The function of Properdin (Factor P) is to stabilize the alternative pathway convertase. Its binding to C3bBb extends the half-life of the complex. The concentration in plasma is approximately 20 µg/mL. Factor P has a molecular weight of 224 kDa, consisting of four identical chains of approximately 53 kDa molecular weight.

The alternative complement pathway provides innate protection against microbial agents in the absence of specific antibody. The activation of this complement pathway can be triggered by a variety of substances, including microbial polysaccharides or lipids, gram-negative bacterial lipopolysaccharides, and surface determinants present on some viruses, parasites, virally infected mammalian cells and cancer cells. In autoimmune diseases, the alternative complement pathway may contribute directly to tissue damage.

### Specificity

The specificity of the monoclonal antibody was established via ELISA and RIA. This antibody was shown to bind to highly purified Factor P, but not to C3, Factor B, Factor H, nor other isolated complement proteins. The antibody was also shown to immunoprecipitate radiolabeled Factor P, using protein A-bearing bacteria to capture the immune complex. The antibody was not shown to inhibit the binding of radiolabeled Factor P to EC3b cells.

### Applications

| EIA <sup>1</sup> | RIA | IHC <sup>2</sup> | WB  | FACS |
|------------------|-----|------------------|-----|------|
| >1:10,000        | N/T | >1:1000          | N/T | N/T  |

N/T = Not tested.

### Specifications

|                 |  |
|-----------------|--|
| Catalog Number: | A235                                     |
| Concentration:  | 1.0-1.2 mg/ml                            |
| Purity:         | ≥ 95% by SDS PAGE                        |
| Volume/Vial:    | 100 µl                                   |
| Storage:        |  |
| ≤ 30 Days       | 2-8°C                                    |
| > 30 Days       | ≤ -20°C                                  |
| Buffer:         | Borate Buffered Saline<br>(pH 8.4 ± 0.2) |
| Isotype:        | IgG <sub>1</sub> k                       |

**Species Cross Reactivity:** None

### References

- 1 On file with Quidel Corporation.
- 2 Shiraishi, M. et al. Improved hepatic microcirculation by human soluble urinary thrombomodulin in the xeno-perfused porcine liver. Transplantation 731:1046-1050 (2001).

### Ordering and Additional Information

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### Related Products

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