



## Monoclonal Anti-human Factor B Antibody

### ORDERING INFORMATION

**Catalog Number:** MAB2739

**Clone:** 313011

**Lot Number:** XNC01

**Size:** 100 µg

**Formulation:** 0.2 µm filtered solution in PBS  
with 5% trehalose

**Storage:** -20° C

**Reconstitution:** sterile PBS

**Specificity:** human Factor B

**Immunogen:** NS0-derived rhFactor B

**Ig class:** mouse IgG<sub>2b</sub>

**Recommended Applications:**

Western blot  
Immunoprecipitation

**Other Application:**

Direct ELISA

### Background

Factor B, also known as C3/C5 convertase, is a serine protease of the alternative pathway of the complement system. The amino acid sequence of human factor B is 85% identical to that of rat and mouse.

### Preparation

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, NS0-derived, recombinant human Factor B (rhFactor B; Accession # P00751; aa 26 - 764). The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography.

### Formulation

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

### Reconstitution

Reconstitute with sterile PBS. If 0.2 mL of PBS is used, the antibody concentration will be 500 µg/mL.

### Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a **manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

### Specificity

This antibody detects rhFactor B in direct ELISAs and Western blots. In these formats, this antibody shows no cross-reactivity with rhFactor D or rhFactor I.

### Applications

**Western blot** - This antibody can be used at 1 - 2 µg/mL with the appropriate secondary reagents to detect human Factor B. Using a colorimetric detection system, the detection limit for rhFactor B is approximately 5 ng/lane under non-reducing conditions. Use of this antibody under reducing conditions is not recommended. Chemiluminescent detection with WesternGlo™ Chemiluminescent Detection Substrate (R&D Systems, Catalog # AR004) will increase sensitivity by 5 to 50 fold.

**Immunoprecipitation** - This antibody was used at a concentration of 25 µg/mL to immunoprecipitate rhFactor B from conditioned cell culture medium. The recovered rhFactor B can be detected in Western blots using a polyclonal antibody (R&D Systems, Catalog # AF2739 or BAF2739).

**Direct ELISA** - This antibody can be used at 0.5 - 1.0 µg/mL with the appropriate secondary reagents to detect human Factor B. The detection limit for rhFactor B is approximately 2 ng/well.

**Optimal dilutions should be determined by each laboratory for each application.**