

## ZAP70 (4B2) monoclonal antibody

Catalog: MB0187

Host: Mouse

Reactivity: Human

### Background:

The activation of T lymphocytes by antigens is mediated by the T cell receptor (TCR), which is a multisubunit complex assembled from at least six different genes. The TCR subunits include the  $\alpha$  and  $\beta$  chains, the CD3  $\gamma$ ,  $\delta$  and  $\epsilon$  chains and a  $\zeta$ -containing homodimer or heterodimer. The protein tyrosine kinase ZAP-70 binds to the phosphorylated immunoreceptor tyrosine-base activation motifs (ITAMs) of the TCR  $\zeta$  chain through two src-homology (SH2) domains. This binding results in the phosphorylation of ZAP-70 on multiple tyrosine residues, including Tyr292 and Tyr319. ZAP-70 is autophosphorylated on Tyr292, which is thought to negatively regulate ZAP-70 function in lymphocytes. Alternatively, ZAP-70 is positively regulated by phosphorylation on Tyr319, which mediates the SH2-dependent interaction between Lck and ZAP-70.

### Product:

1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

### Molecular Weight:

Predicted band size:70KDa

Observed band size:70KDa

### Swiss-Prot:

P43403

### Purification&Purity:

The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

### Applications:

WB: 1:1000

IP: 1:50~200

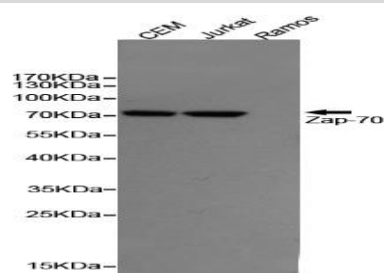
### Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

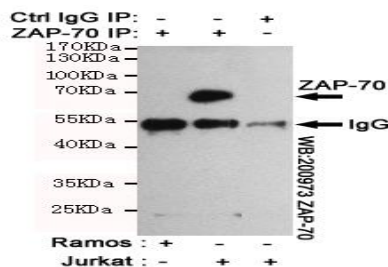
### Specificity:

This antibody detects endogenous levels of ZAP70 and does not cross-react with related proteins.

### DATA:



Western blot detection of ZAP-70 in CEM and Jurkat cell lysates, negative in the Ramos cell lysates using ZAP-70 mouse mAb (1:1000 diluted).



Immunoprecipitation analysis of Jurkat cell lysates (ZAP-70 positive expression cell line) and Ramos cell lysates (ZAP-70 negative expression cell line) using ZAP-70 mouse mAb.

### Note:

For research use only, not for use in diagnostic procedure.

### Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park, MN 55416, USA.

Email: [info@bioworld.com](mailto:info@bioworld.com)

Tel: 6123263284

Fax: 6122933841

### Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046, P. R. China.

Email: [info@biogot.com](mailto:info@biogot.com)

Tel: 0086-025-68037686

Fax: 0086-025-68035151