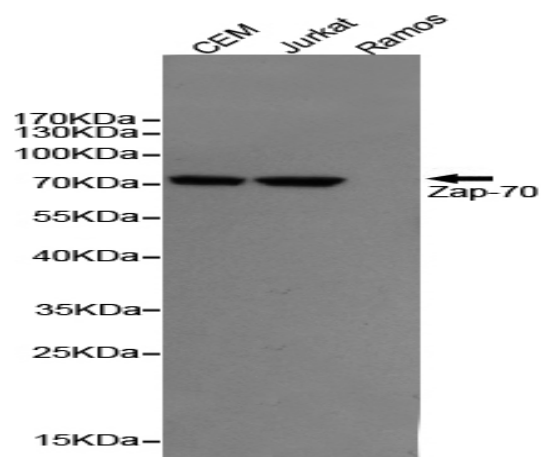


## ZAP-70 mouse mAb

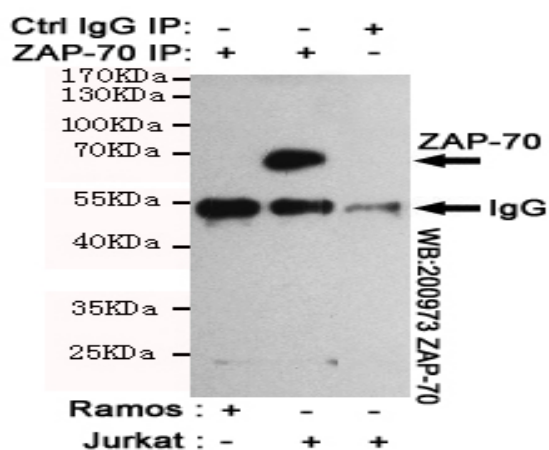
|                              |  |
|------------------------------|--|
| <b>Catalog No :</b>          | YM1392   |
| <b>Reactivity :</b>          | Human  |
| <b>Applications :</b>        | WB;IP  |
| <b>Target :</b>              | ZAP-70   |
| <b>Fields :</b>              | >>Ras signaling pathway;>>NF-kappa B signaling pathway;>>Natural killer cell mediated cytotoxicity;>>Th1 and Th2 cell differentiation;>>Th17 cell differentiation;>>T cell receptor signaling pathway;>>Yersinia infection;>>PD-L1 expression and PD-1 checkpoint pathway in cancer;>>Primary immunodeficiency |
| <b>Gene Name :</b>           | zap70  |
| <b>Human Gene Id :</b>       | 7535   |
| <b>Human Swiss Prot No :</b> | P43403   |
| <b>Mouse Swiss Prot No :</b> | P43404   |
| <b>Immunogen :</b>           | Purified recombinant human ZAP-70 protein fragments expressed in E.coli.   |
| <b>Specificity :</b>         | This antibody detects endogenous levels of ZAP-70 and does not cross-react with related proteins.  |
| <b>Formulation :</b>         | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.  |
| <b>Source :</b>              | Monoclonal, Mouse  |
| <b>Dilution :</b>            | wb dilution 1:1000   |
| <b>Purification :</b>        | The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.   |
| <b>Concentration :</b>       | 1 mg/ml  |
| <b>Storage Stability :</b>   | -15°C to -25°C/1 year(Do not lower than -25°C)   |

|                               |  |
|-------------------------------|--|
| <b>Observed Band :</b>        | 70kD   |
| <b>Cell Pathway :</b>         | Natural killer cell mediated cytotoxicity;T_Cell_Receptor;Primary immunodeficiency;  |
| <b>Background :</b>           | This gene encodes an enzyme belonging to the protein tyrosine kinase family, and it plays a role in T-cell development and lymphocyte activation. This enzyme, which is phosphorylated on tyrosine residues upon T-cell antigen receptor (TCR) stimulation, functions in the initial step of TCR-mediated signal transduction in combination with the Src family kinases, Lck and Fyn. This enzyme is also essential for thymocyte development. Mutations in this gene cause selective T-cell defect, a severe combined immunodeficiency disease characterized by a selective absence of CD8-positive T-cells. Two transcript variants that encode different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],   |
| <b>Function :</b>             | catalytic activity:ATP + a [protein]-L-tyrosine = ADP + a [protein]-L-tyrosine phosphate.,disease:Defects in ZAP70 are the cause of selective T-cell defect (STD) [MIM:176947]. STD is an autosomal recessive form of severe combined immunodeficiency characterized by a selective absence of CD8-type T-cells.,domain:The SH2 domain binds to the phosphorylated tyrosine-based activation motif (TAM) of CD3Z.,function:Plays a role in T-cell development and lymphocyte activation. Essential for TCR-mediated IL-2 production. Isoform 1 induces TCR-mediated signal transduction, isoform 2 does not.,online information:ZAP70 mutation db,PTM:Phosphorylated on tyrosine residues upon T-cell antigen receptor (TCR) stimulation. Tyr-319 phosphorylation is essential for full activity.,similarity:Belongs to the protein kinase superfamily. Tyr protein kinase family. SYK/ZAP-70 subfamily.,similarity:Contains 1 prote |
| <b>Subcellular Location :</b> | Cytoplasm . Cell membrane ; Peripheral membrane protein . In quiescent T-lymphocytes, it is cytoplasmic. Upon TCR activation, it is recruited at the plasma membrane by interacting with CD247/CD3Z. Colocalizes together with RHOH in the immunological synapse. RHOH is required for its proper localization to the cell membrane and cytoskeleton fractions in the thymocytes (By similarity). .  |
| <b>Expression :</b>           | Expressed in T- and natural killer cells. Also present in early thymocytes and pro/pre B-cells.  |
| <b>Tag :</b>                  | ip   |
| <b>Sort :</b>                 | 24447  |
| <b>No4 :</b>                  | 1  |
| <b>Host :</b>                 | Mouse  |
| <b>Modifications :</b>        | Unmodified   |

## Products Images



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). Predicted band size: 70 kDa. Observed band size: 70 kDa.



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.