

## DESCRIPTION

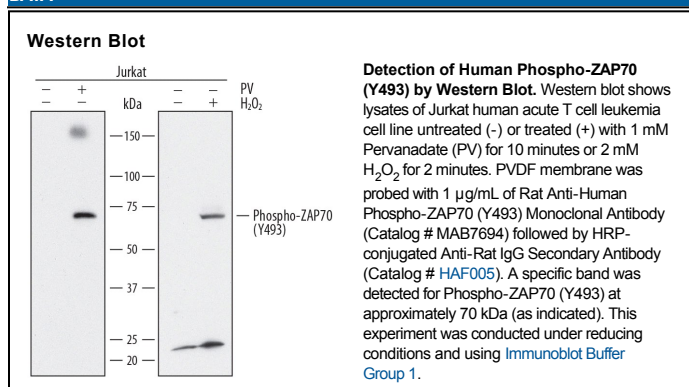
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human ZAP70 when phosphorylated at Y493.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 797917
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Phosphopeptide containing the human ZAP70 Y493 site
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
<b>Western Blot</b>	1 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

ZAP70 (zeta-chain (TCR) associated protein kinase 70 kDa), expressed primarily in T and NK cells, is a Syk family cytosolic protein tyrosine kinase that consists of two N-terminal SH2 domains and a C-terminal tyrosine kinase domain. Upon T cell receptor activation and phosphorylation of TCR ITAMs by Src family kinases, ZAP70 is recruited to phosphorylated ITAM sequences and subsequently phosphorylated on several tyrosine residues. ZAP70 has been implicated in several immune disorders. An autosomal recessive form of SCID in humans has been attributed to a homozygous mutation in the kinase domain of ZAP70. ZAP70 expression also defines an aggressive subset of CLL.