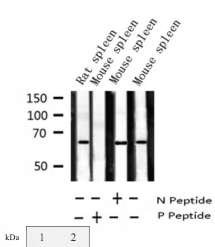
Phospho-ZAP-70 (Tyr319) Ab

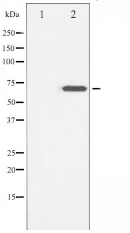
Cat.#: AF3312	Concn.: 1mg/ml	Mol.Wt.: 70kDa
Size: 100ul,200ul	Source: Rabbit	Clonality: Polyclonal

Application:	WB 1:500-1:2000 IHC 1:50-1:200, IF/ICC 1:100-1:500
Reactivity:	Human,Mouse,Rat
Purification:	The Ab is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Specificity:	Phospho-ZAP-70 (Tyr319) Ab detects endogenous levels of ZAP-70 only when phosphorylated at Tyrosine 319.
Immunogen:	A synthesized peptide derived from human ZAP-70 around the phosphorylation site of Tyrosine 319.
Uniprot:	P43403
Description:	ZAP70 (human) a tyrosine kinase of the Syk family. Associates with the T-cell antigen receptor zeta-chain after TCR stimulation. Phosphorylated by Src-family kinases following antigen receptor activation. Plays a role in lymphocyte activation.
Subcellular Location:	Cytoplasm. Cell membrane. After antigen stimulation, isoform 1 concentrates at the immunological synapse and isoform 2 remains cytoplasmic. Co-localizes together with RHOH in the immunological synapse. RHOH is required for its proper localization to the cell membrane and cytoskeleton fractions in the thymocytes.
Tissue Specificity:	Expressed in T- and natural killer cells. Also present in early thymocytes and pro/pre B-cells.
Similarity:	Composed of 2 N-terminal SH2 domains and a C-terminal kinase domain. The tandem SH2 domains bind to the doubly phosphorylated tyrosine-based activation motif (ITAM) of CD247/CD3Z and the non-canonical phosphorylated tyrosine-based activation motif (TAM) of RHOH (By similarity). The interdomain B located between the second SH2 and the kinase domain contains 3 tyrosines (Tyr-292, Tyr-315, Tyr-319) that are phosphorylated following TCR activation. These sites have been implicated in binding to other signaling molecules including CBL or VAV1. Thus, ZAP70 can also function as a scaffold by recruiting additional factors to the stimulated TCR complex.Belongs to the protein kinase superfamily. Tyr protein kinase family. SYK/ZAP-70 subfamily.

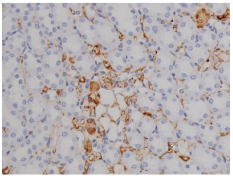
Storage Condition and Buffer:	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt.



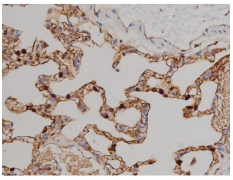
Western blot analysis of Phospho-ZAP-70 (Tyr319) expression in various lysates



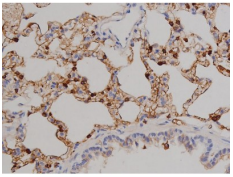
Western blot analysis of ZAP-70 phosphorylation expression in Jurkat whole cell lysates,The lane on the left is treated with the antigen-specific peptide.



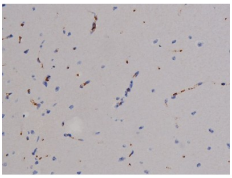
AF3312 at 1/200 staining Rat kidney tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the Ab for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.



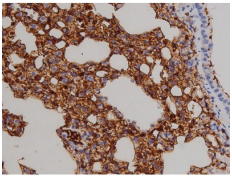
AF3312 at 1/200 staining Rat lung tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the Ab for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.



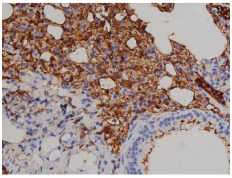
AF3312 at 1/200 staining Rat lung tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the Ab for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.



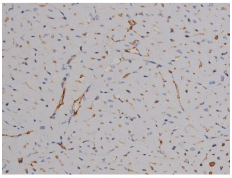
AF3312 at 1/200 staining Mouse brain tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the Ab for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.



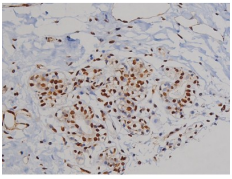
AF3312 at 1/200 staining Mouse lung2.JPG tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the Ab for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.



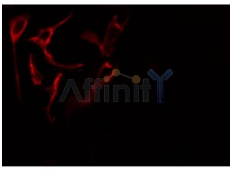
AF3312 at 1/200 staining Mouse lung1.JPG tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the Ab for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.



AF3312 at 1/200 staining Mouse heart tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the Ab for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.



AF3312 at 1/200 staining Human heart tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the Ab for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.



AF3312 staining Hela cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25°C. The primary Ab was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab(Cat.# S0006), diluted at 1/600, was used as secondary Ab.

IMPORTANT: For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.