

Product datasheet for **AP20820PU-N**

ZAP70 pTyr319 Rabbit Polyclonal Antibody

Product data:

| | |
|-------------------------|---|
| Product Type: | Primary Antibodies |
| Applications: | IF, IHC, WB |
| Recommended Dilution: | Western blot: 1/500-1/1000. Immunohistochemistry on Paraffin Sections: 1/50-1/200. Immunofluorescence: 1/50-1/200. |
| Reactivity: | Human, Mouse, Rat |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Immunogen: | Synthetic phosphopeptide derived from Human ZAP70 around the phosphorylation site of Tyrosine 319. |
| Specificity: | This antibody detects endogenous levels of ZAP-70 protein only when phosphorylated at Tyr319. |
| Formulation: | PBS, pH 7.2 State: Aff - Purified State: Liquid purified Ig fraction (> 95% by SDS-PAGE) Preservative: 0.05% Sodium Azide |
| Concentration: | 1.0 mg/ml |
| Purification: | Immunoaffinity Chromatography |
| Conjugation: | Unconjugated |
| Storage: | Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. |
| Stability: | Shelf life: one year from despatch. |
| Predicted Protein Size: | ~ 70 kDa |
| Gene Name: | zeta chain of T cell receptor associated protein kinase 70kDa |
| Database Link: | Entrez Gene 22637 Mouse Entrez Gene 301348 Rat Entrez Gene 7535 Human P43403 |



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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 Ti 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 Tyr 292 and Tyr 319. ZAP-70 is autophosphorylated on Tyr 292, which is thought to negatively regulate ZAP-70 function in lymphocytes. Alternatively, ZAP-70 is positively regulated by phosphorylation on Tyr 319, which mediates the SH2-dependent interaction between Lck and ZAP-70.

Synonyms:

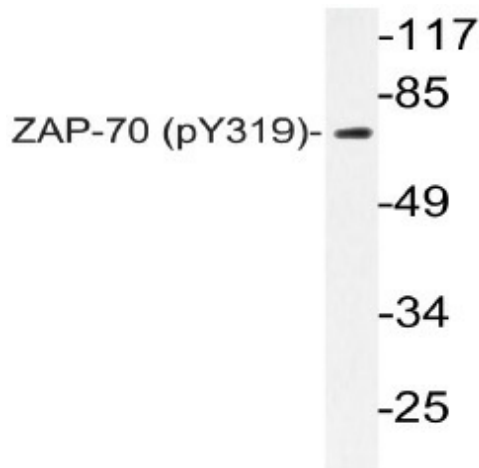
ZAP-70, ZAP 70, SRK

Protein Families:

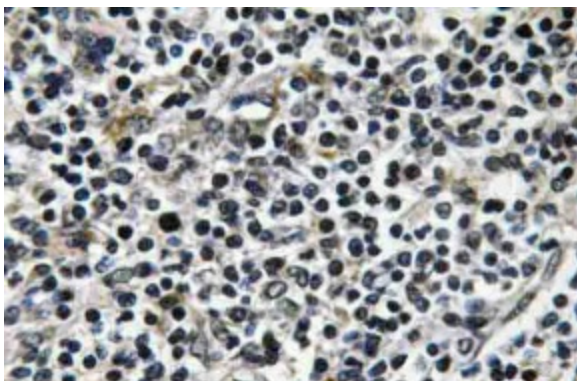
Druggable Genome, Protein Kinase

Protein Pathways:

Natural killer cell mediated cytotoxicity, Primary immunodeficiency, T cell receptor signaling pathway

Product images:

Western blot (WB) analyzes of p-ZAP-70 antibody in extracts from Jurkat cells.



Immunohistochemistry (IHC) analyzes of p-ZAP-70 antibody in paraffin-embedded human thymus gland tissue.