

**Anti-PTPN22 Antibody**  
**Catalog # AP53984****Specification**

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**Anti-PTPN22 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q9Y2R2</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	91705

**Anti-PTPN22 Antibody - Additional Information****Gene ID** 26191**Other Names**

PTPN8; Tyrosine-protein phosphatase non-receptor type 22; Hematopoietic cell protein-tyrosine phosphatase 70Z-PEP; Lymphoid phosphatase; LyP; PEST-domain phosphatase; PEP

**Target/Specificity**

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human PTPN22. The exact sequence is proprietary.

**Dilution**

WB~~1/500 - 1/1000

**Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

**Storage**

Store at -20 °C. Stable for 12 months from date of receipt

**Anti-PTPN22 Antibody - Protein Information****Name** PTPN22**Synonyms** PTPN8**Function**

Acts as a negative regulator of T-cell receptor (TCR) signaling by direct dephosphorylation of the Src family kinases LCK and FYN, ITAMs of the TCRz/CD3 complex, as well as ZAP70, VAV, VCP and other key signaling molecules (PubMed:<a href="http://www.uniprot.org/citations/16461343" target="\_blank">16461343</a>, PubMed:<a href="http://www.uniprot.org/citations/18056643" target="\_blank">18056643</a>). Associates with and probably dephosphorylates CBL. Dephosphorylates LCK at its activating 'Tyr-394' residue (PubMed:<a href="http://www.uniprot.org/citations/21719704" target="\_blank">21719704</a>).



Dephosphorylates ZAP70 at its activating 'Tyr-493' residue (PubMed:<a href="http://www.uniprot.org/citations/16461343" target="\_blank">16461343</a>). Dephosphorylates the immune system activator SKAP2 (PubMed:<a href="http://www.uniprot.org/citations/21719704" target="\_blank">21719704</a>). Positively regulates toll-like receptor (TLR)-induced type 1 interferon production (PubMed:<a href="http://www.uniprot.org/citations/23871208" target="\_blank">23871208</a>). Promotes host antiviral responses mediated by type 1 interferon (By similarity). Regulates NOD2-induced pro-inflammatory cytokine secretion and autophagy (PubMed:<a href="http://www.uniprot.org/citations/23991106" target="\_blank">23991106</a>). Acts as an activator of NLRP3 inflammasome assembly by mediating dephosphorylation of 'Tyr-861' of NLRP3 (PubMed:<a href="http://www.uniprot.org/citations/27043286" target="\_blank">27043286</a>). Dephosphorylates phospho-anandamide (p-AEA), an endocannabinoid to anandamide (also called N-arachidonoyl ethanolamide) (By similarity).

### Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:P29352}.

### Tissue Location

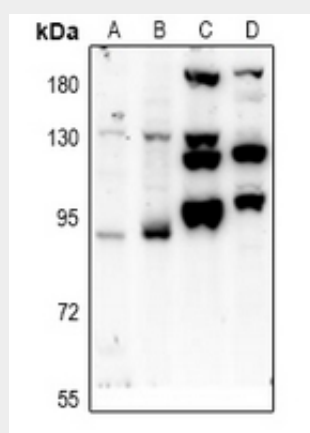
Expressed in bone marrow, B and T-cells, PBMCs, natural killer cells, monocytes, dendritic cells and neutrophils (PubMed:15208781). Both isoform 1 and 4 are predominantly expressed in lymphoid tissues and cells. Isoform 1 is expressed in thymocytes and both mature B and T-cells.

## Anti-PTPN22 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-PTPN22 Antibody - Images



Western blot analysis of PTPN22 expression in Jurkat (A), K562 (B), C6 (C), BV2 (D) whole cell lysates.

## Anti-PTPN22 Antibody - Background



Rabbit polyclonal antibody to PTPN22