

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

Anti-PTPN22 Antibody - Product Information

Application	WB
Primary Accession	Q9Y2R2
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

Recognizes endogenous levels of PTPN22 protein.

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:16461343, PubMed:18056643). Associates with and probably dephosphorylates CBL. Dephosphorylates LCK at its activating 'Tyr-394' residue (PubMed:21719704). Dephosphorylates ZAP70 at its activating 'Tyr-493' residue (PubMed:21719704).

[16461343](http://www.uniprot.org/citations/16461343)).
Dephosphorylates the immune system activator SKAP2 (PubMed:[21719704](http://www.uniprot.org/citations/21719704)). Positively regulates toll-like receptor (TLR)-induced type 1 interferon production (PubMed:[23871208](http://www.uniprot.org/citations/23871208)). Promotes host antiviral responses mediated by type 1 interferon (By similarity). Regulates NOD2-induced pro-inflammatory cytokine secretion and autophagy (PubMed:[23991106](http://www.uniprot.org/citations/23991106)). Acts as an activator of NLRP3 inflammasome assembly by mediating dephosphorylation of 'Tyr-861' of NLRP3 (PubMed:[27043286](http://www.uniprot.org/citations/27043286)). 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

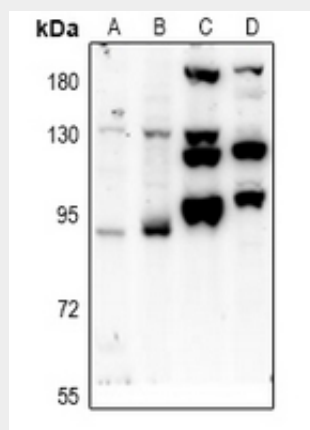
Expressed in bone marrow, B and T-cells, PBMCs, natural killer cells, monocytes, dendritic cells and neutrophils (PubMed:15208781). Both isoform 1 and 4 are predominantly expressed in lymphoid tissues and cells. Isoform 1 is expressed in thymocytes and both mature B and T-cells.

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