

PTPN22 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16722B

Specification

PTPN22 Antibody (C-term) - Product Information

Application	WB, E
Primary Accession	Q9Y2R2
Other Accession	NP_001180360.1 , NP_036543.4
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	91705
Antigen Region	663-691

PTPN22 Antibody (C-term) - Additional Information

Gene ID 26191

Other Names

Tyrosine-protein phosphatase non-receptor type 22, Hematopoietic cell protein-tyrosine phosphatase 70Z-PEP, Lymphoid phosphatase, LyP, PEST-domain phosphatase, PEP, PTPN22, PTPN8

Target/Specificity

This PTPN22 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 663-691 amino acids from the C-terminal region of human PTPN22.

Dilution

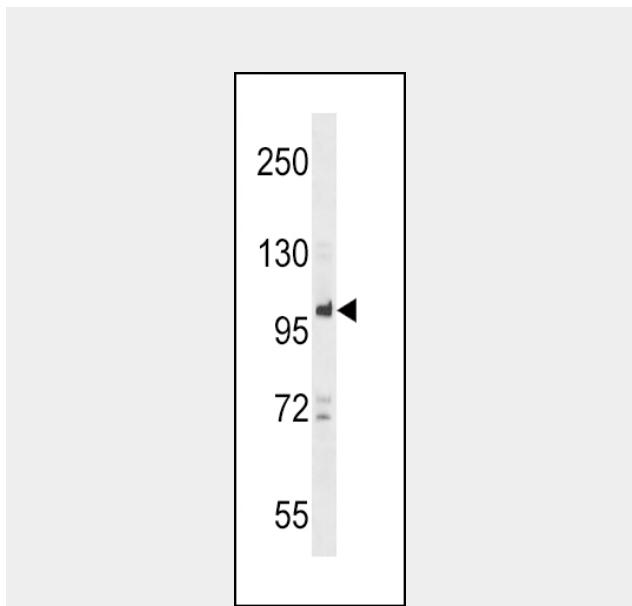
WB~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.



PTPN22 Antibody (C-term) (Cat. #AP16722b) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the PTPN22 antibody detected the PTPN22 protein (arrow).

PTPN22 Antibody (C-term) - Background

This gene encodes of member of the non-receptor class 4 subfamily of the protein-tyrosine phosphatase family. The encoded protein is a lymphoid-specific intracellular phosphatase that associates with the molecular adapter protein CBL and may be involved in regulating CBL function in the T-cell receptor signaling pathway. Mutations in this gene may be associated with a range of autoimmune disorders including Type 1 Diabetes, rheumatoid arthritis, systemic lupus erythematosus and Graves' disease. Alternatively spliced transcript variants encoding distinct isoforms have been described.

Precautions

PTPN22 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PTPN22 Antibody (C-term) - Protein Information

Name PTPN22

Synonyms PTPN8

Function

Acts as 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:16461343). Dephosphorylates the immune system activator SKAP2 (PubMed:21719704). Positively regulates toll-like receptor (TLR)-induced type 1 interferon production (PubMed:23871208). Promotes host antiviral responses mediated by type 1 interferon (By similarity). Regulates NOD2-induced pro-inflammatory cytokine secretion and autophagy (PubMed:23991106). Dephosphorylates phospho-anandamide (p-AEA), an endocannabinoid to anandamide (also called N-arachidonoylethanolamide) (By similarity).

Cellular Location

PTPN22 Antibody (C-term) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Andersen, M.K., et al. Diabetes Care 33(9):2062-2064(2010)
Bianco, B., et al. Scand. J. Immunol. 72(3):256-259(2010)
Pradhan, V., et al. J Postgrad Med 56(3):239-242(2010)
Sfar, I., et al. Arch Inst Pasteur Tunis 86 (1-4), 51-62 (2009) :

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.

PTPN22 Antibody (C-term) - 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](#)