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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 IgG**
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.

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 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: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). Acts as an activator of NLRP3 inflammasome assembly by mediating dephosphorylation of 'Tyr-861' of NLRP3 (PubMed:27043286). Dephosphorylates phospho-anandamide (p-AEA), an endocannabinoid to anandamide (also called N-arachidonoylethanolamide) (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.

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 Cytomety
- Cell Culture

PTPN22 Antibody (C-term) - Images

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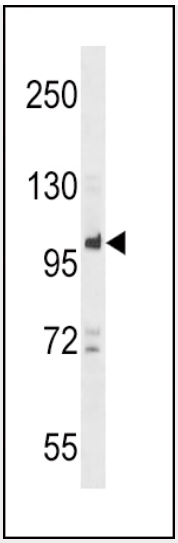

PTPN22 Antibody (C-term) (Cat. #AP16722b) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the PTPN22 antibody detected the PTPN22 protein (arrow).

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.

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) :