

Anti-PTPN22 Antibody

Catalog # AP53984

Product Information

Application	WB
Primary Accession	Q9Y2R2
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	91705

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

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-arachidonylethanolamide) (By similarity).

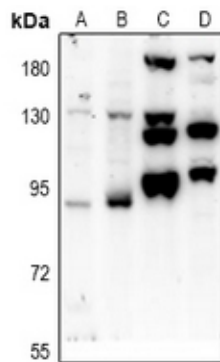
Cellular Location Cytoplasm {ECO:0000250|UniProtKB:P29352}.

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.

Background

Rabbit polyclonal antibody to PTPN22

Images



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

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