

PTPN22 / PEP Antibody (clone 1A6)
Mouse Monoclonal Antibody
Catalog # ALS14522**Specification**

PTPN22 / PEP Antibody (clone 1A6) - Product Information

Application	IHC
Primary Accession	O9Y2R2
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	92kDa KDa

PTPN22 / PEP Antibody (clone 1A6) - Additional Information**Gene ID** 26191**Other Names**

Tyrosine-protein phosphatase non-receptor type 22, 3.1.3.48, Hematopoietic cell protein-tyrosine phosphatase 70Z-PEP, Lymphoid phosphatase, LyP, PEST-domain phosphatase, PEP, PTPN22, PTPN8

Target/Specificity

Human PTPN22

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions

PTPN22 / PEP Antibody (clone 1A6) is for research use only and not for use in diagnostic or therapeutic procedures.

PTPN22 / PEP Antibody (clone 1A6) - 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-arachidonoyl ethanolamide) (By similarity).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:P29352}.

Tissue Location

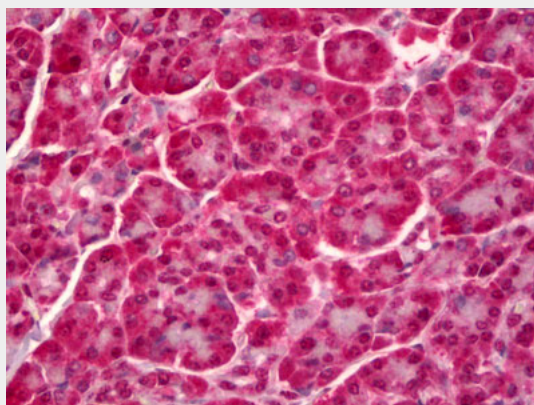
Expressed in bone marrow, B and T-cells, PBMCs, natural killer cells, monocytes, dendritic cells and neutrophils (PubMed:15208781). Both isoform 1 and 4 are predominantly expressed in lymphoid tissues and cells. Isoform 1 is expressed in thymocytes and both mature B and T-cells.

PTPN22 / PEP Antibody (clone 1A6) - 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](#)

PTPN22 / PEP Antibody (clone 1A6) - Images



Anti-PTPN22 antibody IHC of human pancreas.

PTPN22 / PEP Antibody (clone 1A6) - Background

Acts as negative regulator of T-cell receptor (TCR) signaling by direct dephosphorylation of the Src family kinases LCK and FYN, ITAMs of the TCR ζ /CD3 complex, as well as ZAP70, VAV, VCP and other key signaling molecules. Associates with and probably dephosphorylates CBL. Dephosphorylates

LCK at its activating 'Tyr-394' residue. Dephosphorylates ZAP70 at its activating 'Tyr-493' residue. Dephosphorylates the immune system activator SKAP2.

PTPN22 / PEP Antibody (clone 1A6) - References

Cohen S.,et al.Blood 93:2013-2024(1999).

Wang S.,et al.BMC Mol. Biol. 11:78-78(2010).

Liu T.,et al.Submitted (JUL-1998) to the EMBL/GenBank/DDBJ databases.

Ota T.,et al.Nat. Genet. 36:40-45(2004).

Livingston R.J.,et al.Submitted (OCT-2006) to the EMBL/GenBank/DDBJ databases.