

Goat anti-LYP / PTPN22 Antibody
Peptide-affinity purified goat antibody
Catalog # AF4503a**Specification**

Goat anti-LYP / PTPN22 Antibody - Product Information

Application	IHC, IF, FC, Pep-ELISA
Primary Accession	Q9Y2R2
Other Accession	NP_057051 , NP_036543.4 , NP_001180360.1 , NP_001295226.1
Reactivity	Human, Chimpanzee
Host	Goat
Clonality	Polyclonal
Calculated MW	91705

Goat anti-LYP / PTPN22 Antibody - Additional Information**Gene ID** 26191**Other Names**

PTPN22; LYP; Lyp1; Lyp2; protein tyrosine phosphatase, non-receptor type 22 (lymphoid); protein tyrosine phosphatase homolog; lymphoid-specific protein tyrosine phosphatase

Dilution

IHC~~1:100~500

IF~~1:50~200

FC~~1:10~50

Pep-ELISA~~N/A

Format

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

Immunogen

This antibody is specific for human LYP1 and will not cross-react with LYP2.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat anti-LYP / PTPN22 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat anti-LYP / 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 TCR α /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.

Goat anti-LYP / 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](#)

Goat anti-LYP / PTPN22 Antibody - Images