

Goat anti-LYP / PTPN22 Antibody

Peptide-affinity purified goat antibody

Catalog # AF4503a

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
Clone Names	PTPN22
Calculated MW	91705

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.

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.