10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-PTPN22 Picoband Antibody
Catalog # ABO12862

Specification

Anti-PTPN22 Picoband Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P29352
Host	**Rabbit**
Reactivity	**Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for PTPN22 detection. Tested with WB, IHC-P, Direct ELISA in Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-PTPN22 Picoband Antibody - Additional Information

Gene ID 19260

Other Names
Tyrosine-protein phosphatase non-receptor type 22, 3.1.3.48, Hematopoietic cell protein-tyrosine phosphatase 70Z-PEP, PEST-domain phosphatase, PEP, Ptpn22, Ptpn8

Application Details
Western blot, 0.1-0.5 μg/ml

 Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml

 Direct ELISA, 0.1-0.5 μg/ml

Subcellular Localization
Cytoplasm.

Tissue Specificity
Spleen, thymus, lymph node and bone marrow.

Contents
Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen
E. coli-derived mouse PTPN22 recombinant protein (Position: M1-Q309).

Cross Reactivity
No cross reactivity with other proteins.

Storage	**At -20˚C; for one year. After r˚Constitution, at 4˚C; for one month. It˚Can also be aliquotted and stored frozen at -20˚C; for a**

longer time. Avoid repeated freezing and thawing.

Anti-PTPN22 Picoband 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 TCRz/CD3 complex, as well as ZAP70, VAV, VCP and other key signaling molecules (By similarity). Associates with and probably dephosphorylates CBL (By similarity). Dephosphorylates LCK at its activating 'Tyr-394' residue (By similarity). Dephosphorylates ZAP70 at its activating 'Tyr-492' residue (By similarity). Dephosphorylates the immune system activator SKAP2 (By similarity). Positively regulates toll-like receptor (TLR)-induced type 1 interferon production (PubMed:23871208). Promotes host antiviral responses mediated by type 1 interferon (PubMed:23871208). 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) (PubMed:16938887).

Cellular Location
Cytoplasm.

Tissue Location
Brain (at protein level) (PubMed:16938887). Spleen, thymus, lymph node and bone marrow (PubMed:1373816)

Anti-PTPN22 Picoband 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 Cytomety
- Cell Culture

Anti-PTPN22 Picoband Antibody - Images

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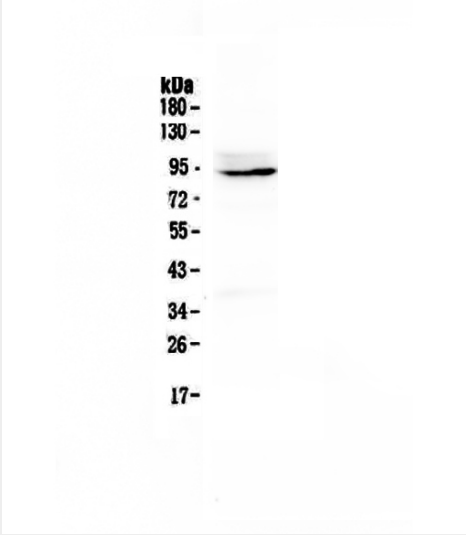

Figure 1. Western blot analysis of PTPN22 using anti-PTPN22 antibody (ABO12862). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat thymus tissue lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PTPN22 antigen affinity purified polyclonal antibody (Catalog # ABO12862) at 0.5 Î¼g/mL overnight at 4Â°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for PTPN22 at approximately 92KD. The expected band size for PTPN22 is at 92KD.

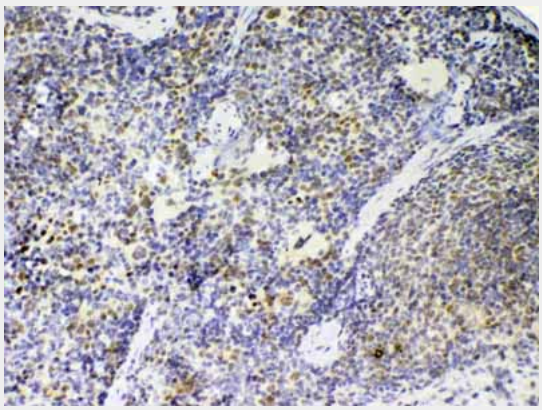

Figure 2. IHC analysis of PTPN22 using anti-PTPN22 antibody (ABO12862).PTPN22 was detected in paraffin-embedded section of mouse spleen tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti-PTPN22 Antibody (ABO12862) overnight at 4Â°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37Â°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

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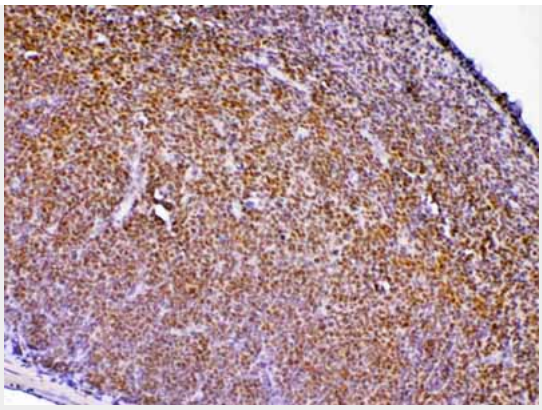

Figure 3. IHC analysis of PTPN22 using anti-PTPN22 antibody (ABO12862).PTPN22 was detected in paraffin-embedded section of rat lymphaden tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti-PTPN22 Antibody (ABO12862) overnight at 4Â°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37Â°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Anti-PTPN22 Picoband Antibody - Background

Protein tyrosine phosphatase, non-receptor type 22 (lymphoid), also known as PTPN22, is a protein that in humans is encoded by the PTPN22 gene. 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.