10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

Anti-Thrombopoietin Picoband Antibody

Catalog # ABO10281

Specification

Anti-Thrombopoietin Picoband Antibody - Product Information

Application	**WB, IHC-P, E**
Primary Accession	P40226
Host	**Rabbit**
Reactivity	**Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Thrombopoietin(Thpo) detection. Tested with WB, IHC-P, ELISA in Mouse;Rat.

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

Anti-Thrombopoietin Picoband Antibody - Additional Information

Gene ID 21832

Other Names
Thrombopoietin, C-mpl ligand, ML, Megakaryocyte colony-stimulating factor, Megakaryocyte growth and development factor, MGDF, Myeloproliferative leukemia virus oncogene ligand, Thpo

Calculated MW
37836 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Mouse, Rat, By Heat

ELISA , 0.1-0.5 µg/ml, Mouse, -
Western blot, 0.1-0.5 µg/ml, Mouse

Subcellular Localization
Secreted.

Tissue Specificity
Found mainly in the liver, kidney and skeletal muscle.

Protein Name
Thrombopoietin

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E. coli-derived mouse Thrombopoietin recombinant protein (Position: S22-H259). Mouse Thrombopoietin shares 79.3% and 92.9% amino acid (aa) sequence identity with human and rat Thrombopoietin, respectively.

Purification
Immunogen affinity purified.

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-Thrombopoietin Picoband Antibody - Protein Information

Name Thpo

Function
Lineage-specific cytokine affecting the proliferation and maturation of megakaryocytes from their committed progenitor cells. It acts at a late stage of megakaryocyte development. It may be the major physiological regulator of circulating platelets.

Cellular Location
Secreted {ECO:0000250|UniProtKB:P40225}.

Tissue Location
Found mainly in the liver, kidney and skeletal muscle

Anti-Thrombopoietin 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-Thrombopoietin Picoband Antibody - Images

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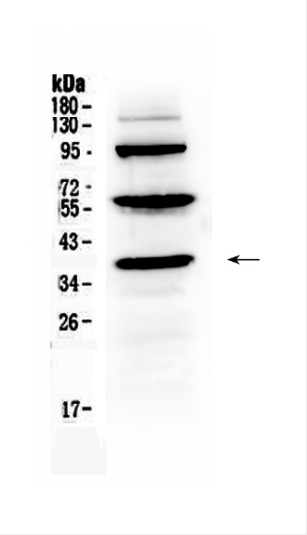

Figure 1. Western blot analysis of Thrombopoietin using anti-Thrombopoietin antibody (ABO10281). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: mouse liver 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-Thrombopoietin antigen affinity purified polyclonal antibody (Catalog # ABO10281) 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 Thrombopoietin at approximately 38KD. The expected band size for Thrombopoietin is at 38KD.

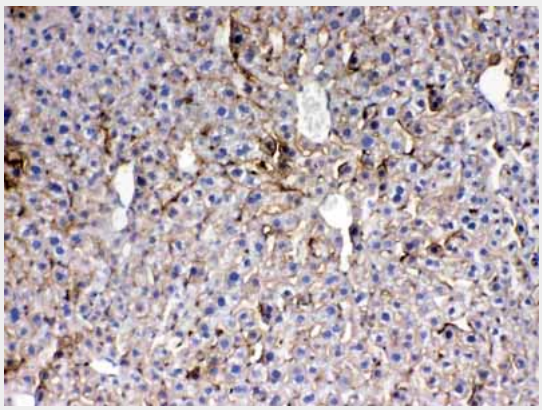

Figure 2. IHC analysis of Thrombopoietin using anti- Thrombopoietin antibody (ABO10281).Thrombopoietin was detected in paraffin-embedded section of mouse liver tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti- Thrombopoietin Antibody (ABO10281) 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.

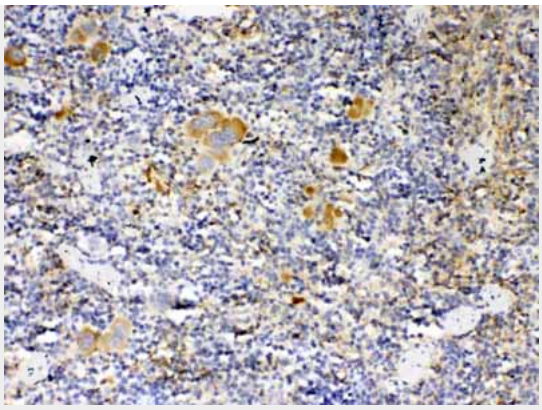

Figure 3. IHC analysis of Thrombopoietin using anti- Thrombopoietin antibody (ABO10281).Thrombopoietin was detected in paraffin-embedded section of mouse spleen tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti- Thrombopoietin Antibody (ABO10281) 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.

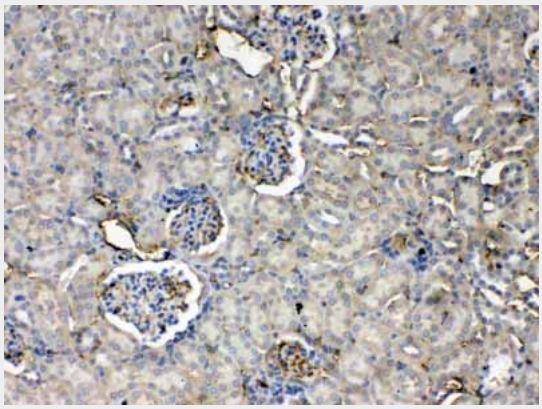

Figure 4. IHC analysis of Thrombopoietin using anti- Thrombopoietin antibody (ABO10281).Thrombopoietin was detected in paraffin-embedded section of mouse kidney tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti- Thrombopoietin Antibody (ABO10281) 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.

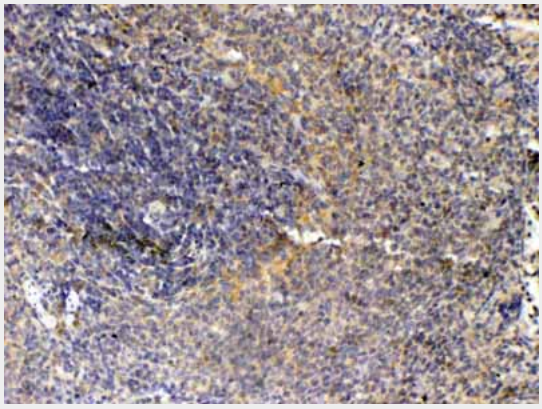

Figure 5. IHC analysis of Thrombopoietin using anti- Thrombopoietin antibody (ABO10281).Thrombopoietin was detected in paraffin-embedded section of rat spleen tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti- Thrombopoietin Antibody (ABO10281) 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.

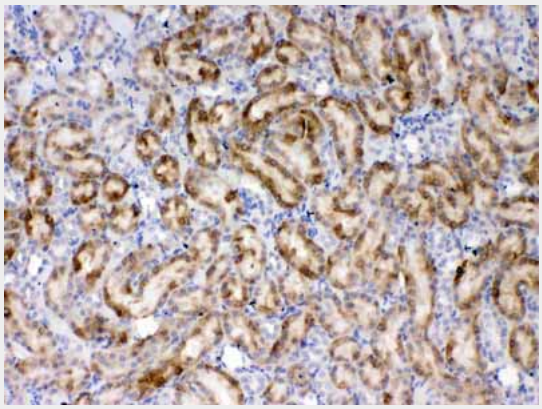

Figure 6. IHC analysis of Thrombopoietin using anti- Thrombopoietin antibody (ABO10281).Thrombopoietin was detected in paraffin-embedded section of rat kidney tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1Î¼g/ml rabbit anti- Thrombopoietin Antibody (ABO10281) 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-Thrombopoietin Picoband Antibody - Background

Thrombopoietin (THPO), also known as megakaryocyte growth and development factor (MGDF), is a protein that in humans is encoded by the THPO gene. Megakaryocytopoiesis is the cellular development process that leads to platelet production. The main functional protein encoded by this gene is a humoral growth factor that is necessary for megakaryocyte proliferation and maturation, as well as for thrombopoiesis. This protein is the ligand for MLP/C_MPL, the product of myeloproliferative leukemia virus oncogene. Mutations in this gene are the cause of thrombocythemia 1. Alternative promoter usage and differential splicing result in multiple transcript variants differing in the 5' UTR and/or coding region. Multiple AUG codons upstream of the main open reading frame (ORF) have been identified, and these upstream AUGs inhibit translation of the main ORF at different extent.