

Rabbit PTN Polyclonal Antibody | anti-PTN antibody

Anti-PTN Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127055	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

PTN; Polyclonal Antibody; Anti-PTN Antibody Picoband; pleiotrophin; Pleiotrophin; Heparin-binding brain mitogen; HBBM; Heparin-binding growth factor 8; HBGF-8; Heparin-binding growth-associated molecule; HB-GAM; Heparin-binding neurite outgrowth-promoting factor 1; HBNF-1; Osteoblast-specific factor 1; OSF-1; HBNF1; NEGF1; anti-PTN antibody

PRODUCT SPECIFICATIONS

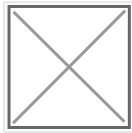
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Osteoblast and brain.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-PTN antibody	ELISA, FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E coli-derived human PTN recombinant protein (Position: D61-K148).
Subcellular Localization	Secreted
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Secreted growth factor that induces neurite outgrowth and which is mitogenic for fibroblasts, epithelial, and endothelial cells (PubMed:1768439, PubMed:1733956). Binds anaplastic lymphoma kinase (ALK) which induces MAPK pathway activation, an important step in the anti-apoptotic signaling of PTN and regulation of cell proliferation (PubMed:11278720). Binds to cell-surface target proteins via their chondroitin sulfate groups (PubMed:26896299). Down-regulates PTPRZ1 activity (PubMed:16814777).
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



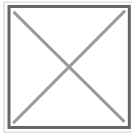
FCM/FACS (Flow Cytometry)
Figure 5. Flow Cytometry analysis of U2OS cells using anti-PTN antibody (AAA127055).Overlay histogram showing U2OS cells stained with AAA127055 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-PTN Antibody (AAA127055, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



IHC (Immunohistochemistry)
Figure 4. IHC analysis of PTN using anti-PTN antibody (AAA127055).PTN was detected in a paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-PTN Antibody (AAA127055) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



IHC (Immunohistochemisry)
Figure 3. IHC analysis of PTN using anti-PTN antibody (AAA127055).PTN was detected in a paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-PTN Antibody (AAA127055) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



IHC (Immunohiostchemistry)
Figure 2. IHC analysis of PTN using anti-PTN antibody (AAA127055).PTN was detected in a paraffin-embedded section of human glioma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-PTN Antibody (AAA127055) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



WB (Western Blot)
Figure 1. Western blot analysis of PTN using anti-PTN antibody (AAA127055).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 30 ug of sample under reducing conditions.Lane 1: human U251 whole cell lysates,Lane 2: rat brain tissue lysates,Lane 3: rat C6 whole cell lysates,Lane 4: mouse brain tissue cell lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-PTN antigen affinity purified polyclonal antibody (#AAA127055) at 0.5ug/mL overnight at 4 degree 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 1:5000 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 PTN at approximately 19 kDa. The expected band size for PTN is at 19 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-PTN antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-PTN antibody	Primary Antibodies; Cancer; Cytokines; Cytoskeleton/ECM; Extracellular Matrix; Growth and Development; Growth Factors; Immunology; Innate Immunity; Neurology Process; Neuroscience; Signal Transduction; Structures
References	1. "Entrez Gene: PTN pleiotrophin (heparin binding growth factor 8, neurite growth-promoting factor 1)". 2. Vanderwinden JM, Mailleux P, Schiffmann SN, Vanderhaeghen JJ (1992). "Cellular distribution of the new growth factor pleiotrophin (HB-GAM) mRNA in developing and adult rat tissues". Anat. Embryol. 186 (4): 387-406. 3. Said EA, Courty J, Svab J, Delbé J, Krust B, Hovanessian AG (September 2005). "Pleiotrophin inhibits HIV infection by binding the cell surface-expressed nucleolin". FEBS J. 272 (18): 4646-59.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4506281
NCBI GeneID	5764
NCBI Accession #	NP_002816.1
NCBI GenBank Nucleotide #	NM_002825.5
UniProt Accession #	P21246; Q5U0B0; Q6ICQ5; Q9UCC6
Molecular Weight	18,942 Da
NCBI Official Full Name	pleiotrophin
NCBI Official Synonym Full Names	pleiotrophin
NCBI Official Symbol	PTN
NCBI Official Synonym Symbols	HARP; HBNF; HBGF8; NEGF1
NCBI Protein Information	pleiotrophin; HBBM; OSF-1; HB-GAM; HBGF-8; HBNF-1; osteoblast-specific factor 1; heparin-binding brain mitogen; heparin binding growth factor 8; heparin-binding growth factor 8; heparin affin regulatory protein; neurite growth-promoting factor 1; heparin-
UniProt Protein Name	Pleiotrophin
UniProt Gene Name	PTN
UniProt Synonym Gene Names	HBNF1; NEGF1; PTN; HBBM; HBGF-8; HB-GAM; HBNF-1; OSF-1
UniProt Entry Name	PTN_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/ptn-antibody-flow-cytometry-immunohistochemistry-western-blot-elisa/127055>