

**PTN Antibody (monoclonal) (M01)**

Mouse monoclonal antibody raised against a partial recombinant PTN.

Catalog # AT3491a

**Specification**

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**PTN Antibody (monoclonal) (M01) - Product Information**

Application	<b>WB, IHC</b>
Primary Accession	<a href="#">P21246</a>
Other Accession	<a href="#">NM_002825</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1 Kappa</b>
Calculated MW	<b>18942</b>

**PTN Antibody (monoclonal) (M01) - Additional Information****Gene ID** 5764**Other Names**

Pleiotrophin, PTN, 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, PTN, HBNF1, NEGF1

**Target/Specificity**

PTN (NP\_002816, 45 a.a. ~ 154 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

**Dilution**

WB~~1:500~1000

**Format**

Clear, colorless solution in phosphate buffered saline, pH 7.2 .

**Storage**

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**Precautions**

PTN Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

**PTN Antibody (monoclonal) (M01) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

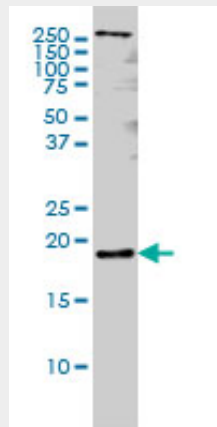
- [Western Blot](#)
- [Blocking Peptides](#)

- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

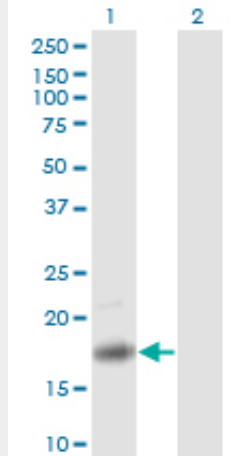
### PTN Antibody (monoclonal) (M01) - Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (37.84 kDa) .

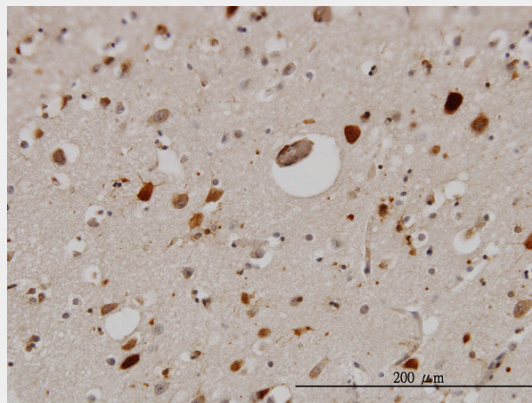


PTN monoclonal antibody (M01), clone 5C3 Western Blot analysis of PTN expression in HeLa S3 NE ( (Cat # AT3491a )



Western Blot analysis of PTN expression in transfected 293T cell line by PTN monoclonal antibody (M01), clone 5C3.

Lane 1: PTN transfected lysate(18.9 KDa).  
Lane 2: Non-transfected lysate.



Immunoperoxidase of monoclonal antibody to PTN on formalin-fixed paraffin-embedded human cerebral cortex. [antibody concentration 3 ug/ml]

#### PTN Antibody (monoclonal) (M01) - References

- 1.Expression of the growth factor pleiotrophin and its receptor protein tyrosine phosphatase beta/zeta in the serum, cartilage and subchondral bone of patients with osteoarthritis.Kaspiris A, Mikelis C, Heroult M, Khaldi L, Grivas TB, Kouvaras I, Dangas S, Vasiliadis E, Liote F, Courty J, Papadimitriou E.Joint Bone Spine. 2013 Jan 17. doi:pii: S1297-319X(12)00296-5. 10.1016/j.jbspin.2012.10.024. [Epub ahead of print]
- 2.Interplay between Integrin and Nucleolin Regulates Human Endothelial and Glioma Cell Migration.Koutsoumpa M, Polytarchou C, Courty J, Zhang Y, Kieffer N, Mikelis C, Skandalis SS, Hellman U, Iliopoulos D, Papadimitriou E.J Biol Chem. 2013 Jan 4;288(1):343-54. doi: 10.1074/jbc.M112.387076. Epub 2012 Nov 16.
- 3.Pleiotrophin promotes microglia proliferation and secretion of neurotrophic factors by activating extracellular signal-regulated kinase 1/2 pathway.Miao J, Ding M, Zhang A, Xiao Z, Qi W, Luo N, Di W, Tao Y, Fang Y.Neurosci Res. 2012 Sep 18. pii: S0168-0102(12)00173-3. doi: 10.1016/j.neures.2012.09.001. [Epub ahead of print]
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- 5.A peptide corresponding to the C-terminal region of pleiotrophin inhibits angiogenesis in vivo and in vitro.Mikelis C, Lamprou M, Koutsoumpa M, Koutsoubas AG, Spyrianti Z, Zompra AA, Spiliopoulos N, Vradis AA, Katsoris P, Spyroulias GA, Cordopatis P, Courty J, Papadimitriou E.J Cell Biochem. 2011

Feb 22. doi: 10.1002/jcb.23066. [Epub ahead of print]6. Integrin  $\alpha$  $\nu$  $\beta$ 3 is a pleiotrophin receptor required for pleiotrophin-induced endothelial cell migration through receptor protein tyrosine phosphatase  $\beta$ / $\zeta$ . Mikelis C, Sfaelou E, Koutsoumpa M, Kieffer N, Papadimitriou E. FASEB J. 2009 May;23(5):1459-69. Epub 2009 Jan 13. 7. Aprotinin stimulates angiogenesis and human endothelial cell migration through the growth factor pleiotrophin and its receptor protein tyrosine phosphatase  $\beta$ / $\zeta$ . Koutsoumpa M, Hatziapostolou M, Mikelis C, Koolwijk P, Papadimitriou E. Eur J Pharmacol. 2009 Jan 14;602(2-3):245-9. Epub 2008 Dec 3.