

PTN Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant PTN.

Catalog # AT3491a

Specification

PTN Antibody (monoclonal) (M01) - Product Information

Application	WB, IHC
Primary Accession	P21246
Other Accession	NM_002825
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1 Kappa
Calculated MW	18942

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

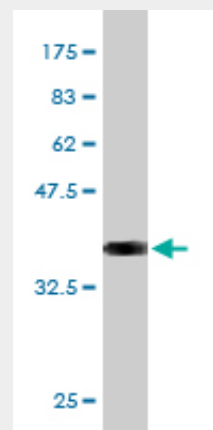
Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage

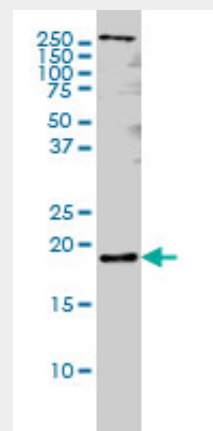
Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions

PTN Antibody (monoclonal) (M01) is for research use only and not for use in



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



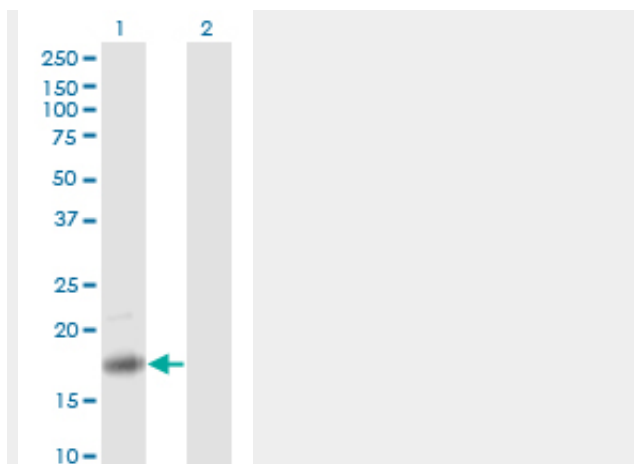
PTN monoclonal antibody (M01), clone 5C3 Western Blot analysis of PTN expression in Hela S3 NE ((Cat # AT3491a)

diagnostic or therapeutic procedures.

PTN Antibody (monoclonal) (M01) - Protocols

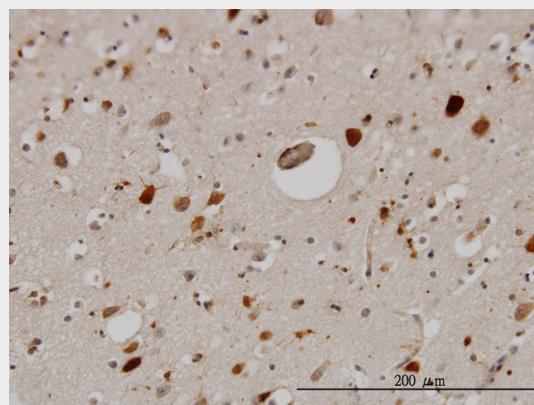
Provided below are standard protocols that you may find useful for product applications.

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



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:pji: S1297-319X(12)00296-5. 10.1016/j.jbspin.2012.10.024. [Epub ahead of print]2.Interplay between ?v?3 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]

4. Implications of pleiotrophin in human PC3 prostate cancer cell growth in vivo. Tsirmoula S, Dimas K, Hatziapostolou M, Lamprou M, Ravazoula P, Papadimitriou E. *Cancer Sci.* 2012 Oct;103(10):1826-32. doi: 10.1111/j.1349-7006.2012.02383.x. Epub 2012 Aug 14.

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, Spyrali 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 α _{nu} β 3 is a pleiotrophin receptor required for pleiotrophin-induced endothelial cell migration through receptor protein tyrosine phosphatase β / ζ . 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 β / ζ . 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.