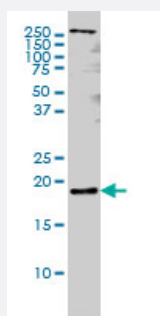


PTN monoclonal antibody (M01), clone 5C3

Catalog # H00005764-M01

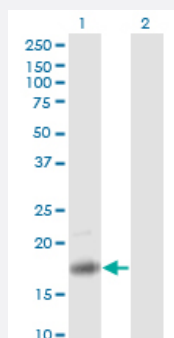
Size 100 ug

Applications



Western Blot (Cell lysate)

PTN monoclonal antibody (M01), clone 5C3 Western Blot analysis of PTN expression in HeLa S3 NE (Cat # L013V3).

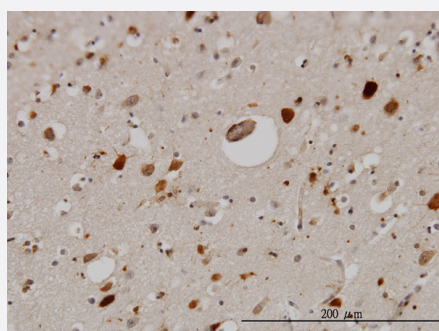


Western Blot (Transfected lysate)

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.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

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



Western Blot detection against Immunogen (37.84 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant PTN.
Immunogen	PTN (NP_002816, 45 a.a. ~ 154 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	SDCGEWQWSVCVPTSGDCGLGTREGTRTGAECKQTMKTQRCKIPCNWKKQFGAECKYQFQA WGECDLNTALKTRTGSLKRALHNAECQKTVTISKPCGKLTkPKPQAESK
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (99); Rat (99)
Isotype	IgG1 Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (37.84 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Cell lysate)

PTN monoclonal antibody (M01), clone 5C3 Western Blot analysis of PTN expression in Hela S3 NE (Cat # L013V3).

[Protocol Download](#)

- Western Blot (Transfected lysate)

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.

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

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

[Protocol Download](#)

- ELISA

Gene Info — PTN

Entrez GeneID [5764](#)

GeneBank Accession# [NM_002825](#)

Protein Accession# [NP_002816](#)

Gene Name PTN

Gene Alias HARP, HBGF8, HBNF, NEGF1

Gene Description pleiotrophin

Omim ID [162095](#)

Gene Ontology [Hyperlink](#)

Gene Summary neurite growth-promoting factor 1)

Other Designations heparin affin regulatory protein|heparin binding growth factor 8|heparin-binding growth-associated molecule|neurite growth-promoting factor 1|pleiotrophin (heparin binding growth factor 8, neurite growth-promoting factor 1)

Publication Reference

- [Binding of pleiotrophin to cell surface nucleolin mediates prostate cancer cell adhesion to osteoblasts.](#)

Margarita Lamprou, Marina Koutsoumpa, Angelos Kaspiris, Katerina Zompra, Theodoros Tselios, Evangelia Papadimitriou.
Tissue & Cell 2022 Jun; 76:101801.

Application: WB-Ce, Human, U87MG cells

- [Pleiotrophin selectively binds to vascular endothelial growth factor receptor 2 and inhibits or stimulates cell migration depending on \$\alpha v \beta 3\$ integrin expression.](#)

Margarita Lamprou, Pinelopi Kastana, Fani Kofina, Haralampos Tzoupis, Spyridoula Barmpoutsis, Md Sanaullah Sajib, Marina Koutsoumpa, Evangelia Poimenidi, Aikaterini A Zompra, Dimitrios Tassopoulos, Effrosyni Choleva, Theodore Tselios, Constantinos M Mikelis, Evangelia Papadimitriou.

Angiogenesis 2020 Nov; 23(4):621.

Application: IP, WB, Human, HUVEC cells

- [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 Jul; 80(4):407.

Application: IHC, WB-Ti, Human, Bone

- [Interplay between \$\alpha v \beta 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.

Journal of Biological Chemistry 2016 Nov; 288(1):343.

Application: PLA, Human, HUVEC, M059K, and U87MG cells

- [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.

Neuroscience Research 2012 Dec; 74(3-4):269.

Application: WB, Rat, Rat microglia

- [Implications of pleiotrophin in human PC3 prostate cancer cell growth in vivo.](#)

Tsirmoula S, Dimas K, Hatzia Apostolou M, Lamprou M, Ravazoula P, Papadimitriou E.

Cancer Science 2012 Oct; 103(10):1826.

Application: WB-Tr, Human, PC-3 cells

- [A peptide corresponding to the C-terminal region of pleiotrophin inhibits angiogenesis in vivo and in vitro.](#)

Mikelis C, Lamprou M, Koutsioumpa M, Koutsioubas AG, Spyrali Z, Zompra AA, Spiliopoulos N, Vradis AA, Katsoris P, Spyroulias GA, Cordopatis P, Courty J, Papadimitriou E.

Journal of Cellular Biochemistry 2011 Jun; 112(6):1532.

Application: WB-Ce, Human, HUVECs

- [Integrin \$\alpha_5\beta_3\$ is a pleiotrophin receptor required for pleiotrophin-induced endothelial cell migration through receptor protein tyrosine phosphatase \$\beta_5/\beta_6\$.](#)

Mikelis C, Sfaelou E, Koutsioumpa M, Kieffer N, Papadimitriou E.

FASEB Journal 2009 May; 23(5):1459.

Application: IP, WB-Ce, Chicken, Human, Chicken embryo chorioallantoic membrane (CAM) lysates, HUVECs, LN18, M059K, C6, U87MG cells

- [Aprotinin stimulates angiogenesis and human endothelial cell migration through the growth factor pleiotrophin and its receptor protein tyrosine phosphatase \$\beta_5/\beta_6\$.](#)

Koutsioumpa M, Hatzia Apostolou M, Mikelis C, Koolwijk P, Papadimitriou E.

European Journal of Pharmacology 2008 Dec; 602(2-3):245.

Application: WB-Ce, Human, HUVEC, LNCaP cells

Disease

- [Genetic Predisposition to Disease](#)
- [Mental Disorders](#)
- [Tobacco Use Disorder](#)