# **Product Datasheet**

# Pleiotrophin/PTN Antibody (5C3) - Azide and BSA Free H00005764-M01

Unit Size: 0.1 mg

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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**Publications: 11** 

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#### H00005764-M01

Pleiotrophin/PTN Antibody (5C3) - Azide and BSA Free

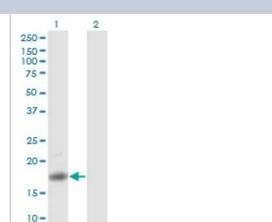
Product Information		
Unit Size	0.1 mg	
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.	
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.	
Clonality	Monoclonal	
Clone	5C3	
Preservative	No Preservative	
Isotype	IgG1 Kappa	
Purity	IgG purified	
Buffer	In 1x PBS, pH 7.4	
Product Description		
Description	Quality control test: Antibody Reactive Against Recombinant Protein.	
Host	Mouse	
Gene ID	5764	
Gene Symbol	PTN	
Species	Human, Rat, Chicken	
Specificity/Sensitivity	PTN - pleiotrophin (heparin binding growth factor 8, neurite growth-promoting factor 1)	
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. SDCGEWQWSVCVPTSGDCGLGTREGTRTGAECKQTMKTQRCKIPCNWKKQ FGAECKYQFQAWGECDLNTALKTRTGSLKRALHNAECQKTVTISKPCGKLTKP KPQAESK	
Notes	This product is produced by and distributed for Abnova, a company based in Taiwan.	
Product Application Details		
Applications	Western Blot, ELISA, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation, Proximity Ligation Assay	
Recommended Dilutions	Western Blot 1:500, ELISA, Immunohistochemistry 1:10-1:500, Immunoprecipitation, Immunohistochemistry-Paraffin 1:10-1:500, Proximity Ligation Assay	
Application Notes	Antibody reactivity against cell lysate and recombinant protein for WB. It has also been used for IHC-P and ELISA.	

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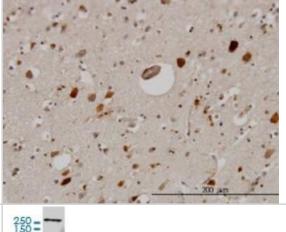


#### Images

Western Blot: Pleiotrophin/PTN Antibody (5C3) [H00005764-M01] -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-Paraffin: Pleiotrophin/PTN Antibody (5C3) [H00005764-M01] - Analysis of monoclonal antibody to PTN on formalinfixed paraffin-embedded human cerebral cortex. Antibody concentration 3 ug/ml.



Western Blot: Pleiotrophin/PTN Antibody (5C3) [H00005764-M01] - PTN monoclonal antibody (M01), clone 5C3 Analysis of PTN expression in Hela S3 NE.

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250 150 100 75			
50 <b>-</b> 37 <b>-</b>			
25 <b>-</b> 20 <b>-</b>			
15-			
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#### **Publications**

Mengmeng Zhang, Kaiwen Zhou, Zilin Wang, Ting Liu, Laura E. Stevens, Filipa Lynce, Wendy Y. Chen, Sui Peng, Yubin Xie, Duanyang Zhai, Qianjun Chen, Yawei Shi, Huijuan Shi, Zhongyu Yuan, Xiaoping Li, Juan Xu, Zhenhai Cai, Jianping Guo, Nan Shao, Ying Lin A Subpopulation of Luminal Progenitors Secretes Pleiotrophin to Promote Angiogenesis and Metastasis in Inflammatory Breast Cancer Cancer Research 2024-06-04 [PMID: 38507720]

Zhu Q, Tan M, Wang C et al. Single-cell RNA sequencing analysis of the temporomandibular joint condyle in 3 and 4month-old human embryos Cell & bioscience 2023-07-19 [PMID: 37468984] (IHC, Human)

Margarita L, Marina K, Angelos K et al. Binding of pleiotrophin to cell surface nucleolin mediates prostate cancer cell adhesion to osteoblasts. Tissue Cell. 2022-04-16 [PMID: 35461017]

Margarita L, Pinelopi K, Fani K et al. Pleiotrophin selectively binds to vascular endothelial growth factor receptor 2 and inhibits or stimulates cell migration depending on 3 integrin expression. Angiogenesis. 2020-07-17 [PMID: 32681389]

Koutsioumpa M, Hatziapostolou M, Mikelis C et al. Aprotinin stimulates angiogenesis and human endothelial cell migration through the growth factor pleiotrophin and its receptor protein tyrosine phosphatase beta/zeta. Eur J Pharmacol. 2008-12-01 [PMID: 19059395]

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Tsirmoula S, Dimas K, Hatziapostolou M et al. Implications of pleiotrophin in human PC3 prostate cancer cell growth in vivo. Cancer Sci. 2012-08-14 [PMID: 22783964]

Miao J, Ding M, Zhang A et al. Pleiotrophin promotes microglia proliferation and secretion of neurotrophic factors by activating extracellular signal-regulated kinase 1/2 pathway. Neurosci Res. 2012-09-18 [PMID: 23000062]

Koutsioumpa M, Polytarchou C, Courty J et al. Interplay between alphavb3 Integrin and Nucleolin Regulates Human Endothelial and Glioma Cell Migration. J Biol Chem. 2012-11-16 [PMID: 23161541]

Kaspiris A, Mikelis C, Heroult M et al. 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. Joint Bone Spine. 2013-01-17 [PMID: 23333521]

Mikelis C, Sfaelou E, Koutsioumpa M et al. Integrin {alpha}{nu}{beta}3 is a pleiotrophin receptor required for pleiotrophin-induced endothelial cell migration through receptor protein tyrosine phosphatase {beta}/{zeta}. FASEB J. 2009-01-13 [PMID: 19141530]

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### Products Related to H00005764-M01

NBP2-35233-5ug	Recombinant Human Pleiotrophin/PTN Protein
NBP1-43319-0.5mg	Mouse IgG1 Kappa Isotype Control (P3.6.2.8.1)
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]

#### Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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