

# Product Datasheet

## PGRMC1 Antibody - BSA Free

### NBP1-83220

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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Updated 9/9/2025 v.20.1

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**NBP1-83220**

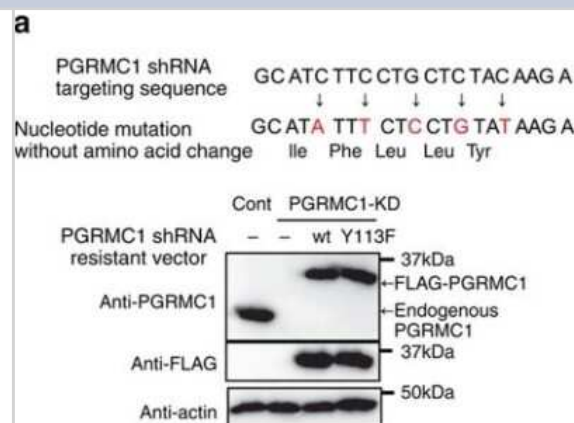
PGRMC1 Antibody - BSA Free

Product Information	
Unit Size	0.1 ml
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS (pH 7.2) and 40% Glycerol
Product Description	
Description	Novus Biologicals Rabbit PGRMC1 Antibody - BSA Free (NBP1-83220) is a polyclonal antibody validated for use in IHC, WB, ICC/IF and Simple Western. Anti-PGRMC1 Antibody: Cited in 15 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	10857
Gene Symbol	PGRMC1
Species	Human, Mouse, Rat
Immunogen	This antibody was developed against Recombinant Protein corresponding to amino acids: DQPAASGDSDDDEPPPLPRLKRRDFTPAELRRFDGVQDPRILMAINGKVFVDVT KGRKFYGPGEYPYGVFAGRDASR
Product Application Details	
Applications	Western Blot, Simple Western, Immunohistochemistry-Paraffin, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Knockdown Validated
Recommended Dilutions	Western Blot 0.04-0.4 ug/ml, Simple Western 1:20, Immunohistochemistry 1:500 - 1:1000, Immunocytochemistry/ Immunofluorescence Reported in literature (PMID:23242527)., Immunohistochemistry-Paraffin 1:500-1:1000, Knockdown Validated
Application Notes	IHC-Paraffin HIER pH6 retrieval is recommended. See <a href="#">Simple Western Antibody Database</a> for Simple Western validation: Tested in RT-4 and U-251MG, separated by Size, antibody dilution of 1:20, apparent MW was 35 kDa

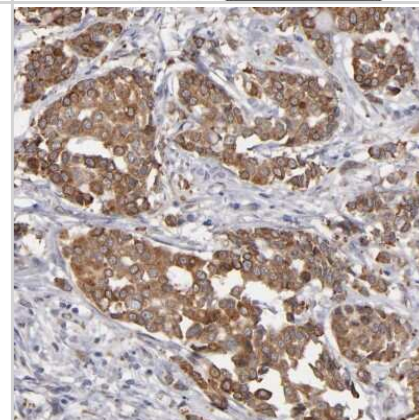


## Images

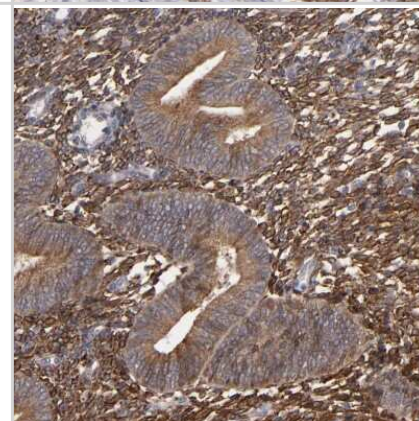
Western Blot: PGRMC1 Antibody [NBP1-83220] - Haem-dependent dimerization of PGRMC1 accelerates tumor growth through the EGFR signaling pathway. Nucleotide sequences of PGRMC1 targeted by shRNA and of the shRNA-resistant full length PGRMC1 expression vector. Stable PGRMC1-knockdown (PGRMC1-KD) HCT116 cells were transiently transfected with the shRNA-resistant expression vector of wild-type PGRMC1 (wt) or the Y113F mutant (Y113F). Image collected and cropped by CiteAb from the following publication (<https://www.nature.com/articles/ncomms11030>), licensed under a CC-BY license.



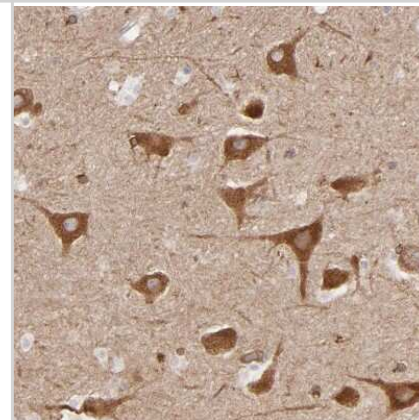
Immunohistochemistry-Paraffin: PGRMC1 Antibody [NBP1-83220] - Staining of human breast cancer shows strong cytoplasmic positivity in tumor cells.



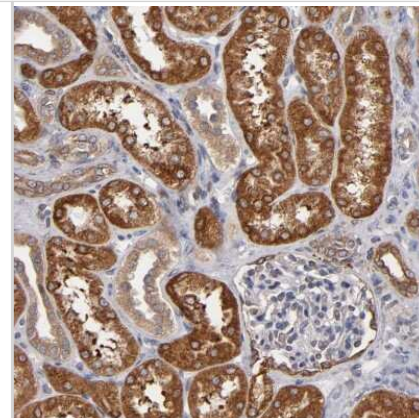
Immunohistochemistry-Paraffin: PGRMC1 Antibody [NBP1-83220] - Staining of human endometrium shows moderate to strong cytoplasmic positivity in glandular and stromal cells.



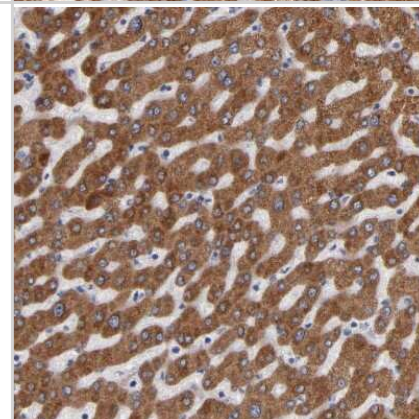
Immunohistochemistry-Paraffin: PGRMC1 Antibody [NBP1-83220] - Staining of human hippocampus shows strong cytoplasmic positivity in neuronal cells.



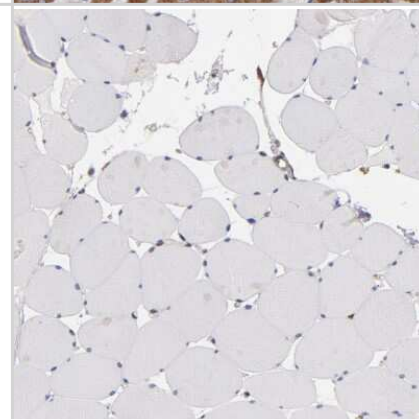
Immunohistochemistry-Paraffin: PGRMC1 Antibody [NBP1-83220] - Staining of human kidney shows moderate to strong cytoplasmic positivity in cells in tubules.



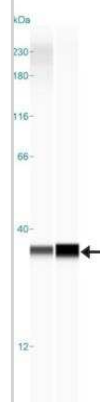
Immunohistochemistry-Paraffin: PGRMC1 Antibody [NBP1-83220] - Staining of human liver shows strong cytoplasmic positivity in hepatocytes.



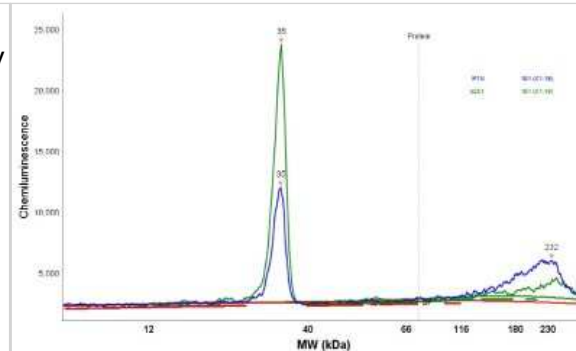
Immunohistochemistry-Paraffin: PGRMC1 Antibody [NBP1-83220] - Staining of human skeletal muscle shows no cytoplasmic positivity in myocytes as expected.



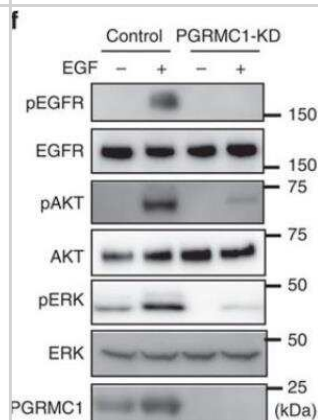
Simple Western: PGRMC1 Antibody [NBP1-83220] - Simple Western lane view shows a specific band for PGRMC1 in 0.2 mg/ml of RT-4 (left) and U-251MG sp (right) lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.



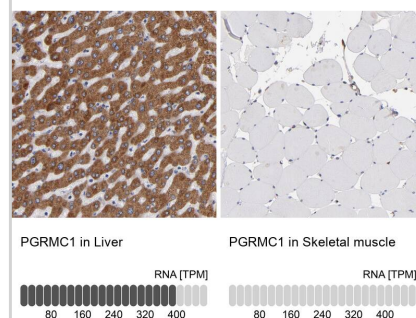
Simple Western: PGRMC1 Antibody [NBP1-83220] - Electropherogram image(s) of corresponding Simple Western lane view. PGRMC1 antibody was used at 1:20 dilution on RT-4 and U-251MG sp lysates(s).



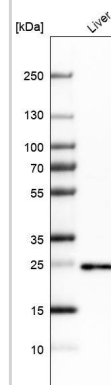
Western Blot: PGRMC1 Antibody [NBP1-83220] - Haem-dependent dimerization of PGRMC1 is necessary for tumor proliferation mediated by EGFR signaling. HCT116 cells expressing control shRNA or those knocking down PGRMC1 (PGRMC1-KD) were treated with EGF or left untreated, and components of the EGFR signaling pathway were detected by Western blotting. Image collected and cropped by CiteAb from the following publication (<https://www.nature.com/articles/ncomms11030>), licensed under a CC-BY license.



Analysis in human liver and skeletal muscle tissues using NBP1-83220 antibody. Corresponding PGRMC1 RNA-seq data are presented for the same tissues.

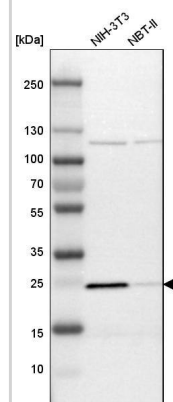


Analysis in human liver tissue.

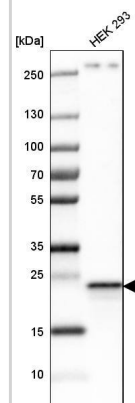




Analysis in mouse cell line NIH-3T3 and rat cell line NBT-II.



Analysis in human cell line HEK 293.



## Publications

Kabe Y, Koike I, Yamamoto T et al. Glycyrrhizin Derivatives Suppress Cancer Chemoresistance by Inhibiting Progesterone Receptor Membrane Component 1 Cancers (Basel) 2021-06-29 [PMID: 34209885]

Dubey, N, Hoffman, J F Et al. The ESC/E(Z) complex, an effector of response to ovarian steroids, manifests an intrinsic difference in cells from women with premenstrual dysphoric disorder. Mol Psychiatry 2017-08-01 [PMID: 28044059] (WB, Mouse)

Jalloh A, Flowers A, Hudson C et al. Polyphenol Supplementation Reverses Age-Related Changes in Microglial Signaling Cascades International Journal of Molecular Sciences 2021-06-14 [PMID: 34198710] (Simple Western, Rat)

Kabe Y, Nakane T, Koike I et al. Haem-dependent dimerization of PGRMC1/Sigma-2 receptor facilitates cancer proliferation and chemoresistance. Nat Commun 2016-03-18 [PMID: 26988023] (WB)

He H, Cattran AW, Nguyen T et al. Triple-responsive Expansile Nanogel for Tumor and Mitochondria Targeted Photosensitizer Delivery. Biomaterials 2014-11-01 [PMID: 25154666] (IF/IHC, Human)

.Allen TK, Feng L, Grotegut CA, Murtha AP Progesterone Receptor Membrane Component 1 as the Mediator of the Inhibitory Effect of Progestins on Cytokine-Induced Matrix Metalloproteinase 9 Activity In Vitro. Reprod Sci 2014-02-01 [PMID: 23813454] (IF/IHC, Human)

Bali N, Arimoto JM, Morgan TE et al. Progesterone Antagonism of Neurite Outgrowth Depends on Microglial Activation via Pgrmc1/S2R. Endocrinology 2013-07-01 [PMID: 23653459] (ICC/IF, WB, Rat)

Hulce JJ, Cognetta AB, Niphakis MJ et al. Proteome-wide mapping of cholesterol-interacting proteins in mammalian cells. Nat Methods 2013-03-01 [PMID: 23396283]

Peluso JJ, Yuan A, Liu X, Lodde V. Plasminogen Activator Inhibitor 1 RNA-Binding Protein Interacts with Progesterone Receptor Membrane Component 1 to Regulate Progesterones Ability to Maintain the Viability of Spontaneously Immortalized Granulosa Cells and Rat Granulosa Cells. Biol Reprod 2013-01-01 [PMID: 23242527] (WB, ICC/IF, Rat)

Peluso JJ, Lodde V, Liu X. Progesterone Regulation of Progesterone Receptor Membrane Component 1 (PGRMC1) Sumoylation and Transcriptional Activity in Spontaneously Immortalized Granulosa Cells. Endocrinology 2012-08-01 [PMID: 22719051]

Peluso JJ, DeCerbo J, Lodde V. Evidence for a genomic mechanism of action for Progesterone Receptor Membrane Component-1. Steroids 2012-08-01 [PMID: 22326699]

Bali N, Arimoto JM, Iwata N et al. Differential Responses of Progesterone Receptor Membrane Component-1 (Pgrmc1) and the Classical Progesterone Receptor (Pgr) to 17-beta-Estradiol and Progesterone in Hippocampal Subregions that Support Synaptic Remodeling and Neurogenesis. Endocrinology 2012-02-01 [PMID: 22147012]

More publications at <http://www.novusbio.com/NBP1-83220>





### **Novus Biologicals USA**

10730 E. Briarwood Avenue  
Centennial, CO 80112  
USA  
Phone: 303.730.1950  
Toll Free: 1.888.506.6887  
Fax: 303.730.1966  
nb-customerservice@bio-techne.com

### **Bio-Techne Canada**

21 Canmotor Ave  
Toronto, ON M8Z 4E6  
Canada  
Phone: 905.827.6400  
Toll Free: 855.668.8722  
Fax: 905.827.6402  
canada.inquires@bio-techne.com

### **Bio-Techne Ltd**

19 Barton Lane  
Abingdon Science Park  
Abingdon, OX14 3NB, United Kingdom  
Phone: (44) (0) 1235 529449  
Free Phone: 0800 37 34 15  
Fax: (44) (0) 1235 533420  
info.EMEA@bio-techne.com

### **General Contact Information**

www.novusbio.com  
Technical Support: nb-technical@bio-techne.com  
Orders: nb-customerservice@bio-techne.com  
General: novus@novusbio.com

### **Products Related to NBP1-83220**

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NBP1-83220PEP	PGRMC1 Recombinant Protein Antigen
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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### **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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