

# Product Datasheet

## PTGFR Antibody - BSA Free

### NLS1049

Unit Size: 0.05 ml

Keep as concentrated solution. Aliquot and store at -20C or below. Avoid multiple freeze-thaw cycles.

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**NLS1049**

PTGFR Antibody - BSA Free

**Product Information**

<b>Unit Size</b>	0.05 ml
<b>Concentration</b>	1.0 mg/ml
<b>Storage</b>	Keep as concentrated solution. Aliquot and store at -20C or below. Avoid multiple freeze-thaw cycles.
<b>Clonality</b>	Polyclonal
<b>Preservative</b>	0.1% Sodium Azide
<b>Isotype</b>	IgG
<b>Purity</b>	Immunogen affinity purified
<b>Buffer</b>	PBS

**Product Description**

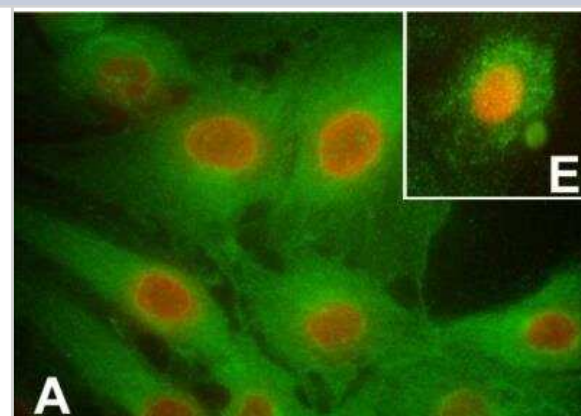
<b>Description</b>	Product can be stored undiluted at 4C for up to 1 month.
<b>Host</b>	Rabbit
<b>Gene ID</b>	5737
<b>Gene Symbol</b>	PTGFR
<b>Species</b>	Human, Porcine, Equine, Primate, Monkey
<b>Reactivity Notes</b>	Predicted cross-reactivity based on sequence identity: Mouse (88%), Rat (88%), Canine (88%), Sheep (81%), Bovine (81%), Hamster (81%), Rabbit (81%).
<b>Specificity/Sensitivity</b>	Human PTGFR. BLAST analysis of the peptide immunogen showed no homology with other human proteins.
<b>Immunogen</b>	Synthetic 16 amino acid peptide from 2nd extracellular domain of human PTGFR.

**Product Application Details**

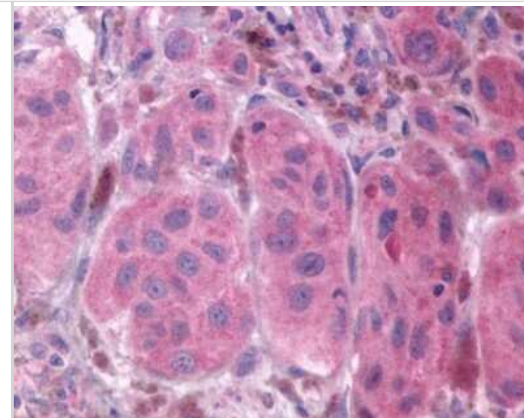
<b>Applications</b>	Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunocytochemistry
<b>Recommended Dilutions</b>	Immunohistochemistry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin 4-8 ug/ml, Immunocytochemistry 1:10 - 1:500

**Images**

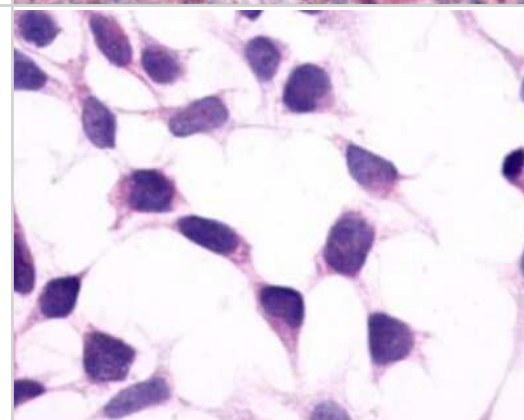
Immunocytochemistry/Immunofluorescence: PTGFR Antibody [NLS1049] - Representative FPr immunofluorescent staining on porcine corpus luteum-microvascular endothelial cells (pCL-MVECs) isolated from the early luteal phase (EL-p) (A), the mid-luteal phase (ML-p). Representative immunostaining of the FPr on non-fixed EL-p pCL-MVECs is shown (E). Image collected and cropped by CiteAb from the following publication ([rbej.biomedcentral.com/articles/10.1186/1477-7827-5-31](https://rbej.biomedcentral.com/articles/10.1186/1477-7827-5-31)), licensed under a CC-BY license.



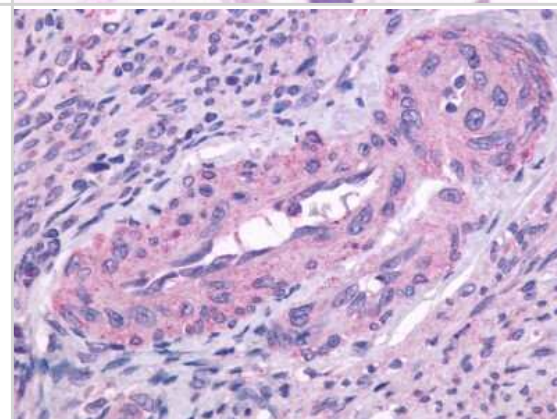
Immunohistochemistry-Paraffin: PTGFR Antibody [NLS1049] - Analysis of anti-FP / PTGFR antibody with human skin, melanoma.



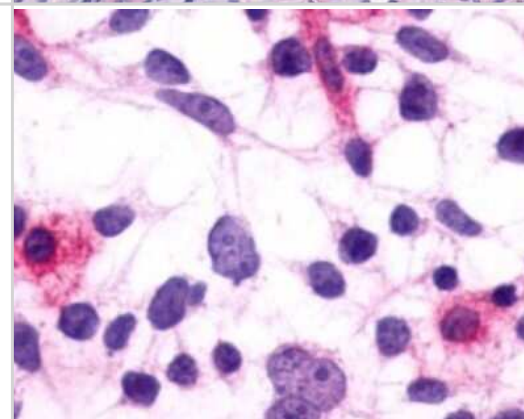
Immunohistochemistry-Paraffin: PTGFR Antibody [NLS1049] - Analysis of anti-FP / PTGFR antibody with transfection control.



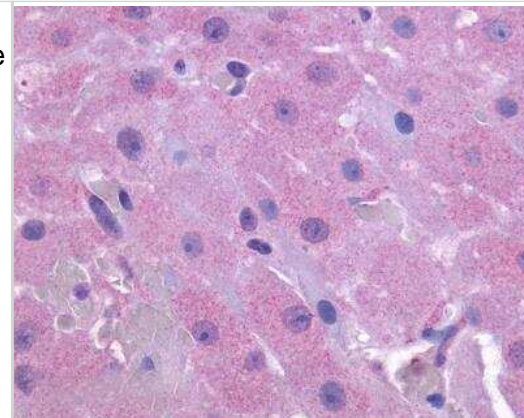
Immunohistochemistry-Paraffin: PTGFR Antibody [NLS1049] - Analysis of anti-FP / PTGFR antibody with human ovary.



Immunohistochemistry-Paraffin: PTGFR Antibody [NLS1049] - Analysis of anti-FP / PTGFR antibody with transfected cells expressing Prostaglandin F2 alpha Receptor at 4 ug/ ml.



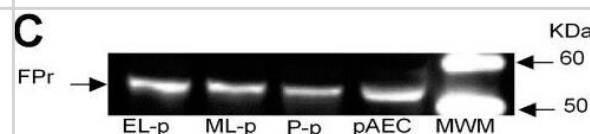
PTGFR Antibody [NLS1049] - Anti-PTGFR antibody IHC of human ovary. Immunohistochemistry of formalin-fixed, paraffin-embedded tissue after heat-induced antigen retrieval.



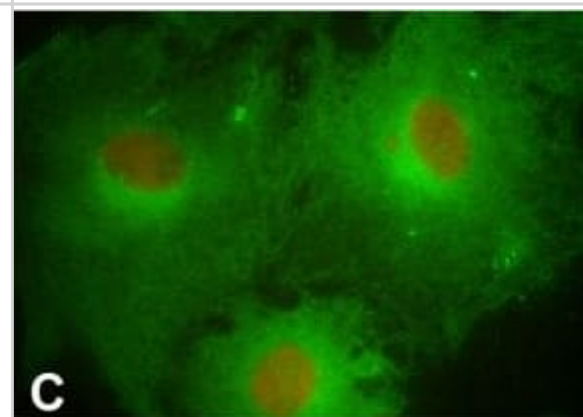
Presence of FPr in porcine corpora lutea (pCLs) at the early-luteal phase (EL-p), the mid-luteal phase (ML-p) and during pregnancy (P-p). A) Relative FPr mRNA expression. The results are presented as Delta Ct (HPRT Ct - FPr Ct). B) FPr protein content. The results are presented as AU (arbitrary units). Data represent mean  $\pm$  SD. Different letters indicate statistically significant differences ( $P < 0.05$ ). C) Representative Western blotting of FPr.



Presence of FPr in porcine corpora lutea-derived microvascular endothelial cells (pCL-MVECs) and porcine Aortic Endothelial Cells (pAECs). A) Relative FPr mRNA expression. The results are presented as Delta Ct (HPRT Ct - FPr Ct). B) FPr protein content. The results are presented as AU (arbitrary units). Data represent mean  $\pm$  SD. Different letters indicate statistically significant differences ( $P < 0.05$ ). C) Representative Western blotting of FPr.

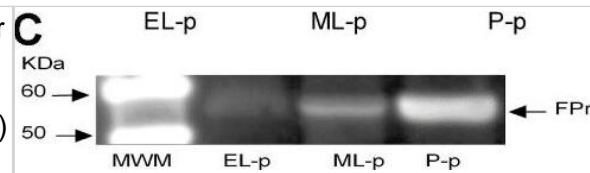


Representative FPr immunofluorescent staining on porcine corpus luteum-microvascular endothelial cells (pCL-MVECs) isolated from the early luteal phase (EL-p) (A), the mid-luteal phase (ML-p) (B) and during pregnancy (P-p) (C) ( $\times 400$ ). D) porcine Aortic Endothelial Cell (pAEC) culture ( $\times 400$ ). Representative immunostaining of the FPr on non-fixed EL-p pCL-MVECs is shown (E).

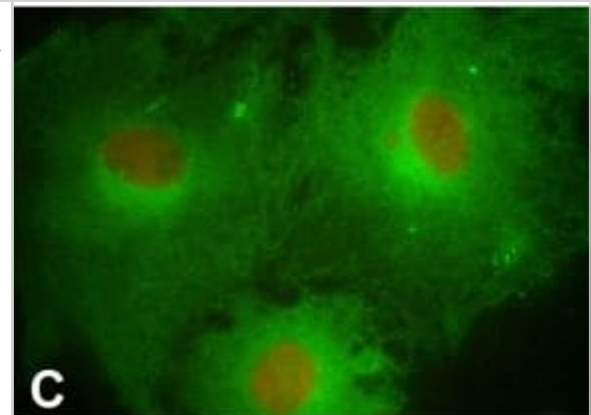




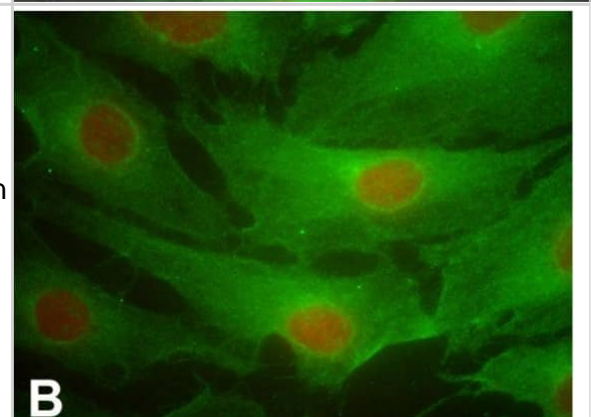
Western Blot: PTGFR Antibody - BSA Free [NLS1049] - Presence of FPr in porcine corpora lutea (pCLs) at the early-luteal phase (EL-p), the mid-luteal phase (ML-p) & during pregnancy (P-p). A) Relative FPr mRNA expression. The results are presented as Delta Ct (HPRT Ct - FPr Ct). B) FPr protein content. The results are presented as AU (arbitrary units). Data represent mean  $\pm$  SD. Different letters indicate statistically significant differences ( $P < 0.05$ ). C) Representative Western blotting of FPr. Image collected & cropped by CiteAb from the following publication (<https://rbej.biomedcentral.com/articles/10.1186/1477-7827-5-31>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



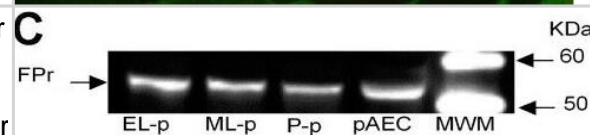
Western Blot: PTGFR Antibody - BSA Free [NLS1049] - Representative FPr immunofluorescent staining on porcine corpus luteum-microvascular endothelial cells (pCL-MVECs) isolated from the early luteal phase (EL-p) (A), the mid-luteal phase (ML-p) (B) & during pregnancy (P-p) (C) ( $\times 400$ ). D) porcine Aortic Endothelial Cell (pAEC) culture ( $\times 400$ ). Representative immunostaining of the FPr on non-fixed EL-p pCL-MVECs is shown (E). Image collected & cropped by CiteAb from the following publication (<https://rbej.biomedcentral.com/articles/10.1186/1477-7827-5-31>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



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## Publications

Bidne KL, Romoser MR, Ross JW et al. Heat stress during the luteal phase decreases luteal size but does not impact circulating progesterone in gilts J. Anim. Sci. 2019-08-02 [PMID: 31372640]

Zannoni A, Bernardini C, Rada T et al. Prostaglandin F2-alpha receptor (FPr) expression on porcine corpus luteum microvascular endothelial cells (pCL-MVECs). Reprod Biol Endocrinol 2007-01-01 [PMID: 17659079]



## Procedures

### Immunohistochemistry Protocol for Prostaglandin F2 alpha Receptor Antibody (NLS1049)

Immunohistochemistry Protocol for Prostaglandin F2 alpha Receptor Antibody (NLS1049):

Immunohistochemistry

1. Prepare tissue with formalin fixation and by embedding it in paraffin wax.
2. Make 4-um sections and place on pre-cleaned and charged microscope slides.
3. Heat in a tissue-drying oven for 45 minutes at 60 degrees Celcius.
4. Deparaffinize the tissues by wash drying the slides in 3 changes of xylene approximately 5 minutes each @ RT.
5. Rehydrate the tissues by washing the slides in 3 changes of 100% alcohol approximately 3 minutes each @ RT.
6. Wash the slides in 2 changes of 95% alcohol approximately 3 minutes each @ RT.
7. Wash the slides in 1 change of 80% alcohol approximately 3 minutes @ RT.
8. Rinse the slides in gentle running distilled water approximately 5 minutes @ RT.
9. Perform antigen retrieval by steaming the slides in 0.01M sodium citrate buffer (pH 6.0) @ 99-100 degrees Celcius for 20 minutes.
10. Remove the slides from the heat and let stand in buffer @ RT for 20 minutes.
11. Rinse the slides in 1X TBS-T for 1 minute @ RT.

**\*\*Do not allow the tissues to dry at any time during the staining procedure\*\***

12. Begin the immunostaining by applying a universal protein block approximately 20 minutes @ RT.
13. Drain protein block from the slides and apply the diluted primary antibody approximately 45 minutes @ RT.
14. Rinse the slide in 1X TBS-T approximately 1 minute @ RT.
15. Apply a biotinylated anti-rabbit IgG (H+L) secondary approximately 30 minutes @ RT.
16. Rinse the slide in 1X TBS-T approximately 1 minute at RT.
17. Apply an alkaline phosphatase streptavidin approximately 30 minutes at RT.
18. Rinse the slide in 1X TBS-T approximately 1 minute at RT.
19. Apply an alkaline phosphatase chromagen substrate approximately 30 minutes at RT.
20. Rinse the slide in distilled water approximately 1 minute @ RT.

**\*\*This method should only be used if the chromagen substrate is alcohol insoluble (ie: Vector Red, DAB)\*\***

21. Dehydrate the tissue by washing the slides in 2 changes of 80% alcohol approximately 1 minute each @ RT.
22. Wash the slides in 2 changes of 95% alcohol approximately 1 minute each @ RT.
23. Wash the slides in 3 changes of 100% alcohol approximately 1 minute each @ RT.
24. Wash the slides in 3 changes of xylene approximately 1 minute each @ RT.
25. Apply cover slip.





### **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 NLS1049**

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HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
210-TA-005	TNF-alpha [Unconjugated]

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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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