

# PGF Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14578c

## **Product Information**

| Application<br>Primary Accession | WB, IHC-P, E<br><u>P49763</u> |
|----------------------------------|-------------------------------|
| Other Accession                  | <u>NP_002623.2</u>            |
| Reactivity                       | Human                         |
| Host                             | Rabbit                        |
| Clonality                        | Polyclonal                    |
| Isotype                          | Rabbit IgG                    |
| Clone Names                      | RB34556                       |
| Calculated MW                    | 24789                         |
| Antigen Region                   | 120-148                       |

### **Additional Information**

| Gene ID            | 5228   |
|--------------------|--|
| Other Names        | Placenta growth factor, PIGF, PGF, PGFL, PLGF  |
| Target/Specificity | This PGF antibody is generated from rabbits immunized with a KLH<br>conjugated synthetic peptide between 120-148 amino acids from the Central<br>region of human PGF.              |
| Dilution           | WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.  |
| Format             | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.<br>This antibody is purified through a protein A column, followed by peptide<br>affinity purification. |
| Storage            | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.  |
| Precautions        | PGF Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.  |

#### **Protein Information**

| Name     | PGF   |
|----------|---|
| Synonyms | PGFL, PLGF  |
| Function | Growth factor active in angiogenesis and endothelial cell growth, stimulating their proliferation and migration. It binds to the receptor |

|                   | FLT1/VEGFR-1. Isoform PIGF-2 binds NRP1/neuropilin-1 and NRP2/neuropilin-2 in a heparin-dependent manner. Also promotes cell tumor growth.                                 |
|-------------------|--|
| Cellular Location | Secreted. Note=The three isoforms are secreted but PIGF-2 appears to remain cell attached unless released by heparin   |
| Tissue Location   | While the three isoforms are present in most placental tissues, PlGF-2 is specific to early (8 week) placenta and only PlGF-1 is found in the colon and mammary carcinomas |

### Background

The PGF gene encodes placenta growth factor, a homolog of vascular endothelial growth factor (VEGFA; MIM 192240), that selectively binds to VEGFR1 (FLT1; MIM 165070) and is involved in angiogenesis (Fischer et al., 2007 [PubMed 17981115]; Bais et al., 2010 [PubMed 20371352]).

#### References

Romero, R., et al. Am. J. Obstet. Gynecol. 203 (4), 361 (2010) : Cowans, N.J., et al. Prenat. Diagn. 30(6):565-570(2010) Romero, R., et al. Am. J. Obstet. Gynecol. 202 (5), 431 (2010) : Andersson, M.K., et al. BMC Cancer 10, 249 (2010) : Pan, P., et al. BMC Cell Biol. 11, 36 (2010) :

#### Images



PGF Antibody (Center) (Cat. #AP14578c) western blot analysis in CEM cell line lysates (35ug/lane).This demonstrates the PGF antibody detected the PGF protein (arrow).



PGF Antibody (Center) (AP14578c)immunohistochemistry analysis in formalin fixed and paraffin embedded human cervix tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of PGF Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.