

AM50307PU-S

Monoclonal Antibody to Placenta growth factor / PGF - Purified

Alternate names:	PGFL, PLGF, PIGF
Quantity:	0.1 mg
Concentration:	0.2 mg/ml
Uniprot ID:	P49763
NCBI:	NP_001193941.1
GeneID:	5228
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10P (for use in human samples), AM03095PU-N
Clone:	PLGF94
Immunogen:	Recombinant human PLGF protein. Genename: PGF
Format:	State: Liquid purified IgG fraction from Bioreactor Concentrate Purification: Protein A/G Chromatography Buffer System: 10mM PBS Preservatives: 0.05% Sodium Azide Stabilizers: 0.05% BSA
Applications:	ELISA: Use BSA free Antibody for coating. Functional Studies: Use Antibody without BSA & Azide. Positive Control: HepG2 cells or human placental and brain tumors. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Molecular Weight:	18kDa
Specificity:	The onset of angiogenesis is believed to be an early event in tumorigenesis and may facilitate tumor progression and metastasis. Several growth factors with angiogenic activity have been described. These include fibroblast growth factor (FGF), platelet derived growth factor (PDGF), vascular endothelial growth factor (VEGF) and placenta growth factor (PIGF). Like VEGF, several PIGF variants have been shown to arise from alternative mRNA splicings. Evidence has suggested VEGF to be an obligatory component in PIGF signaling. While VEGF homodimers and VEGF/PIGF heterodimers function as potent mediators of mitogenic and chemotactic responses in endothelial cells, PIGF homodimers are effectual only at extremely high concentrations. Indeed, many of the physiological effects attributed to VEGF may actually be a result of VEGF/PIGF. VEGF and PIGF share a common receptor, Flt-1, and may also activate Flk-1/KDR. Cellular Localization: Secreted (extracellular). Species: Human. Other species not tested.

Storage:

Store undiluted at 2-8°C.
Shelf life: one year from despatch.

General Readings:

1. Beiswenger TR, Feng L, Brown HL, Heine RP, Murtha AP, Grotegut CA. The effect of cigarette smoke extract on trophoblast cell viability and migration: the role of adrenomedullin. *Reprod Sci.* 2012 May;19(5):526-33. doi: 10.1177/1933719111426600. Epub 2012 Jan 19. PubMed PMID: 22267538.
2. Xu HX, Zhu XD, Zhuang PY, Zhang JB, Zhang W, Kong LQ, et al. Expression and prognostic significance of placental growth factor in hepatocellular carcinoma and peritumoral liver tissue. *Int J Cancer.* 2011 Apr 1;128(7):1559-69. doi: 10.1002/ijc.25492. Epub 2010 Jun 2. PubMed PMID: 20521248.