

36-2926: Anti-PLGF (Placental Growth Factor) Monoclonal Antibody(Clone: PLGF/93)

Clonality :	Monoclonal
Clone Name :	PLGF/93
Application :	ELISA,Functional Assay
Reactivity :	Human
Gene :	PGF
Gene ID :	5228
Uniprot ID :	P49763
Alternative Name :	PGFL; PIGF; placental growth factor (PGF); Vascular endothelial growth factor related protein
Isotype :	Mouse IgG1, kappa
Immunogen Information :	Recombinant human PLGF protein

Description

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 (PLGF). Placenta growth factor (PLGF) is a secreted protein primarily produced by placental trophoblasts but also expressed in other endothelial cells and tumors. There are three isoforms, PLGF-1, PLGF-2, and PLGF-3. PLGF-2 is expressed up until week 8 in the placenta; the placental tissues continuously express PLGF-1 and PLGF-3 but only PLGF-1 is found in colon and mammary carcinomas. PLGF acts to stimulate angiogenesis, endothelial growth and migration. PLGF is a powerful promoter of tumor growth and is upregulated in some cancers, and PLGF is thought to aid in atherosclerotic lesions and neovascular growth surrounding the lesion. Also, PLGF appears to aid aldosterone mediated atherosclerosis. Serum levels of PLGF in some cases are used as a potential biomarker for disease or genetic defect. Recent research indicates that PLGF levels are lower in mothers with Down syndrome fetuses. Evidence has suggested VEGF to be an obligatory component in PLGF signaling. While VEGF homodimers and VEGF/PLGF heterodimers function as potent mediators of mitogenic and chemotactic responses in endothelial cells, PLGF homodimers are effectual only at extremely high concentrations. Indeed, many of the physiological effects attributed to VEGF may actually be a result of VEGF/PLGF. VEGF and PLGF share a common receptor, Flt-1, and may also activate Flk-1/KDR.

Product Info

Amount :	20 µg / 100 µg
Content :	200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage condition :	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

Application Note

ELISA (For coating, order Ab without BSA); Functional Studies (Order Ab without BSA & Azide);

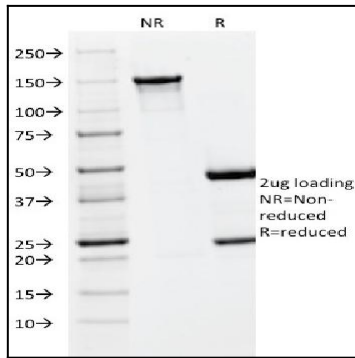


Fig. 1: SDS-PAGE Analysis Purified PLGF Monoclonal Antibody (PLGF/93). Confirmation of Integrity and Purity of Antibody.