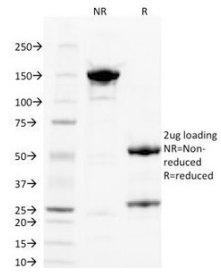
PLGF Antibody / PGF / Placenta Growth Factor [clone PLGF/93] (V3161)

Catalog No.	Formulation	Size
V3161-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3161-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3161SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	PLGF/93
Purity	Protein G affinity chromatography
UniProt	P49763
Localization	Secreted (extracellular)
Applications	ELISA (order BSA/sodium Azide-free Format For Coating) : Functional Studies (order BSA/sodium Azide-free Format) :
Limitations	This PLGF antibody is available for research use only.



SDS-PAGE Analysis of Purified, BSA-Free PLGF Antibody (clone PLGF/93). Confirmation of Integrity and Purity of the Antibody.

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.

Application Notes

The optimal dilution of the PLGF antibody for each application should be determined by the researcher.

Immunogen

Recombinant human protein was used as the immunogen for this PLGF antibody.

Storage

Store the PLGF antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).