PLGF/PIGF2/PGF, Human CellExp™, human recombinant

CATALOG #: 7238-10 10 µg

ALTERNATE NAMES: PGF, PLGF, PIGF2, PIGF, PGFL, SHGC-10760

SOURCE: HEK 293 cells (Leu 19 - Arg 170)

PURITY: ≥ 95% by SDS-PAGE gel

MOL. WEIGHT: The protein is fused with 6×His tag at the C-terminus, has a calculated MW of 20.2 kDa. The predicted N-terminus is Leu 19. DTT-reduced Protein migrates as 28-33 kDa due to glycosylation.

ENDOTOXIN LEVEL: <1 EU/µg by LAL method

FORM: Lyophilized

FORMULATION: Lyophilized from 0.22 µm filtered solution in PBS. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.

STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.

RECONSTITUTION: Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

DESCRIPTION: Placental growth factor (PGF) also known as vascular endothelial growth factor-related protein, PLGF and PIGF2, is a member of the VEGF (vascular endothelial growth factor) sub-family - a key molecule in angiogenesis and vasculogenesis, in particular during embryogenesis. The main source of PGF during pregnancy is the placental trophoblast. PGF is also expressed in many other tissues, including the villous trophoblast. PGF is activated in angiogenesis and endothelial cell growth, stimulating their proliferation and migration. PIGF2 binds NRP1/neuropilin-1 and NRP2/neuropilin-2 in a heparin-dependent manner. Also promotes cell tumor growth.

BIOLOGICAL ACTIVITY: Measured in a cell proliferation assay using MDA - MB – 231 human breast cancer cells. The ED₅₀ for this effect is typically 1 - 10 µg/ml.

RELATED PRODUCTS:
- Human CellExp™ Human Recombinant VEGF-C (Cat # 7231-10)
- Human CellExp™ Human Recombinant VEGF 165 (Cat # 6485-10, -50)
- VEGF121, human recombinant (Cat. No. 4963-10, -50, -1000)
- VEGF165, human recombinant (Cat. No. 4363-10, -50, -1000)
- VEGF165, murine recombinant (Cat. No. 4364-10, -50, -1000)
- VEGF165, rat recombinant (Cat. No. 4365-10, -50, -1000)
- VEGF120, murine recombinant (Cat. No. 4964-10, -100, -1000)
- VEGF-B, human recombinant (Cat. No. 4642-10, -20, -1000)
- VEGF-C, human recombinant (Cat. No. 4633-10, -50, -1000)
- VEGF-C, murine recombinant (Cat. No. 4634-10, -50, -1000)
- VEGF-C, rat recombinant (Cat. No. 4635-10, -50, -1000)
- VEGF-D, human recombinant (Cat. No. 4343-10, -50, -1000)

FOR RESEARCH USE ONLY! Not to be used in humans.