

AR26011PU-L

Mouse Placenta growth factor / PGF - Purified

Alternate names:

PGFL, PLGF, PIGF

Quantity:

20 µg

Background:

Placenta growth factor (PGF) is a member of the vascular endothelial growth factor (VEGF) family of growth factors. PIGF and VEGF share primary structural as well as limited amino acid sequence homology with the A and B chains of PDGF. All eight cysteine residues involved in intra and interchain disulfides are conserved among these growth factors. As a result of alternative splicing, three PIGF RNAs encoding monomeric human PIGF1, PIGF2 and PIGF3 isoform precursors containing 149, 179 and 219 amino acid residues, respectively, have been described. In normal mouse tissues, only one mouse PIGF mRNA encoding the equivalent of human PIGF2 has been identified. Mouse PIGF shares 65% amino acid identity with human PIGF2. The gene for PIGF has been mapped to mouse chromosome 12 and human chromosome 14. PIGF binds with high affinity to Flt1, but not to Flk1/KDR.

Uniprot ID:

[P49764](#)

NCBI:

[NP_032853](#)

GeneID:

[18654](#)

Species:

Mouse

Source:

Insect cells

Format:

State: Lyophilized protein

Purity: >95% by SDS-PAGE and silver stain

Buffer System: 25 mM Tris, 75 mM NaCl pH 8.5

Stabilizers: BSA

Endotoxin Level: < 0.1 ng per µg of PIGF

Reconstitution: PIGF is supplied in lyophilized form with carrier-protein (BSA) and can be reconstituted with 50mM Acetic Acid or PBS/water. This solution can be diluted into other buffered solutions.

Description:

Mouse recombinant Placenta Growth Factor, aa. 135 / 132

Result by N-terminal sequencing: ALSAGNNSTE and AGNNSTE

AA Sequence:

ALSAGNNSTEVEVVPFNEVWGRSYCRPMEKLVYILDEYPDEVSHIFSPSCVLLSRCSGCCGDEGLHCVPIKT
ANITM

QILKIPPNRDPHFYVEMTFSQDVLCECRPILETTKAERRKTGKRKRSRNQTEEPHP

Biological Activity: Measured by its ability to bind to immobilized rh-sFlt-1 in a functional ELISA. Recombinant mouse PIGF can bind to immobilized rh-sFlt-1 (100 ng/well) with a linear range at 0.5-10 ng/ml.

Molecular weight: ~ 40 kDa (Dimer, 135 / 132)

Add. Information:

There are two equal forms, (i) Ala24 to Pro158 and (ii) Ala27 to Pro158.

Protein RefSeq: NP_032853

mRNA RefSeq: NM_008827

Storage:

Store lyophilized at 2-8°C for 6 months or at -20°C long term.
After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:

1. DiPalma, T. et al. (1996) Mamm. Genome 7:6.
2. Cao, Y. et al. (1997) Biochem. Biophys. Res. Commun. 235:493.
3. Ferrara, N. et al. (1997) Endocrin. Rev. 18:4.

Pictures:

Functional ELISA for recombinant mouse PlGF produced in insect cells. A 96-well ELISA plate was coated with rmPlGF [100µl/well; 0,5µg/ml]. Increasing concentrations of recombinant human soluble sFlt-1 were added. Detection was performed using a biotinylated monoclonal antihuman VEGFR-1 antibody. As a control recombinant sKDR was used. There was no binding signal detectable

SDS-PAGE analysis of recombinant mouse PlGF. Samples were loaded in 15% SDS-polyacrylamide gel under non-reducing conditions and stained with Coomassie blue. Lane 1: MWM (kDa); lane 2/3: 2 µg of recombinant mouse PlGF.

