



Recombinant Mouse Placenta Growth Factor

Mouse, Recombinant (PIGF)

Expressed in Insect cells

Cat. M30-020

Size: 20µg

Lot. No. (See product label)

Product Information

Placenta growth factor (PIGF) 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.

Country of Origin: Germany

Sequence:

ALSAGNNSTEVEVVPFNEVWGRSYCRPMEKLVYILDEYPDE
VSHIFSPSCVLLSRCSGCCGDEGLHCVPIKTANITMQILKI
PPNRDPHFYVEMTFQSQDVLCECRPILETTKAERRKTKGKRK
RSRNSQTTEEPHP

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

AA sequence: 135 / 132

MW: ~40.0 kDa

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

Endotoxin level: < 0.1 ng per µg of PIGF

Stabilizer: BSA (50-fold)

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

Formulation: lyophilized

Stability: The lyophilized mouse PIGF, though stable at room temperature, is best stored in working aliquots at -20°C to -70°C. **Avoid repeated freeze-thaw cycles.**

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 or stored frozen for future use.

Biological Activity: Measured by its ability to bind rh-sFlt-1 in a functional ELISA. Immobilized recombinant mouse PIGF (100ng/well) can bind rh-sFlt-1 with a linear range at 0.156 - 10ng/mL.

Gene Information

NCBI Accession number

Protein RefSeq: NP_032853

mRNA RefSeq: NM_008827

Uniprot ID: P49764

References

References:

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**.

For Research use only

Not for human use.



Recombinant Mouse Placenta Growth Factor

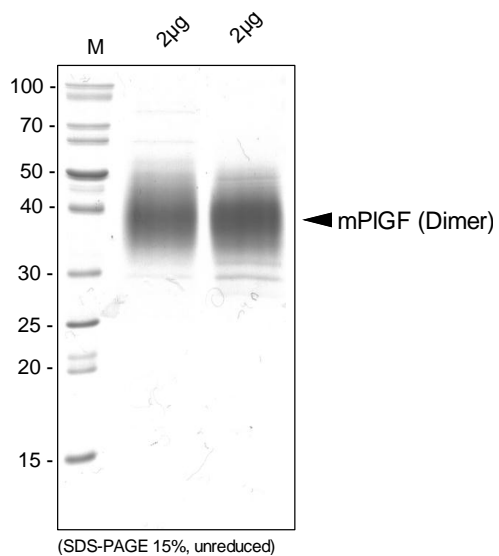


Figure 1. SDS-PAGE analysis of recombinant mouse PIGF. Samples were loaded in 15% SDS-polyacrylamide gel under non-reducing conditions and stained with Coomassie blue.
Lane 1: MWM (kDa); lane 2/3: 2 μ g of recombinant mouse PIGF.