



## PLACENTAL GROWTH FACTOR-2 (PLGF-2)

Mouse, Recombinant  
Expressed in *Sf 21* insect cells

Product Number **P 5739**

### Product Description

Recombinant Mouse Placental Growth Factor-2 (PLGF-2) is produced from a DNA sequence encoding mouse PLGF-2. The secreted dimeric glycosylated mouse PLGF-2 migrates in SDS-PAGE as an approximately 38 kDa protein. As determined by amino-terminal sequence analysis, the mature recombinant PLGF-2 is actually a mixture of 2 peptides with N-terminal sequences: ALSAGNN... and AGNNST... These distinct monomers result from the removal of either a 23 or a 26 amino acid signal peptide from the N-terminus of the precursor protein.

Placenta growth factor (PLGF) is a member of the vascular endothelial growth factor (VEGF) family of growth factors. PLGF, isolated from a human placental cDNA library, has 53% amino acid sequence homology in the PDGF-region of VEGF.<sup>1</sup> Mouse PLGF-2 encodes a 158 amino acid precursor protein that shares a 65% homology with human PLGF-2. The gene for PLGF is organized into seven exons and is mapped to chromosome 14.<sup>2,3</sup> Placenta growth factor will potentiate VEGF that is present at low concentrations *in vitro* and *in vivo*.<sup>4</sup> PLGF binds with high affinity to Flt-1, but not to Flk-1/KDR.<sup>4</sup>

### Reagent

Recombinant Mouse Placental Growth Factor-2 is supplied as 10 µg of protein lyophilized from a 0.2 µm-filtered solution of 30% acetonitrile and 0.1% trifluoroacetic acid (TFA) with 500 µg of bovine serum albumin as carrier protein.

## Product Information

### Preparation Instructions

Reconstitute the contents of the vial to a concentration not less than 10 µg/ml using 0.2 µm-filtered phosphate-buffered saline (PBS) containing 0.1% bovine serum albumin.

### Storage/Stability

Prior to reconstitution, store at -20 °C. Reconstituted product may be stored 2 to 8 °C for a maximum of one month. For prolonged storage, freeze in working aliquots at -20 °C. Avoid repeated freezing and thawing.

### Product Profile

The activity of Recombinant Mouse Placental Growth Factor-2 is measured by its ability to bind to immobilized Flt1/Fc chimera in a functional assay.

Purity: > 97% as determined by SDS-PAGE, visualized by silver stain.

Endotoxin level is <0.1 ng per µg PLGF-2 as determined by the LAL (Limulus amoebocyte lysate) method.

### References

1. Maglione, D., et al., Proc. Natl. Acad. Sci. USA, **88**, 9267 (1991).
2. Maglione, D., et al., Oncogene, **8**, 925 (1993).
3. DiPalma, T., et al., Mamm. Genome, **7**, 6 (1996).
4. Park, J., et al., J. Biol. Chem., **269**, 25646 (1994).

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