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Mouse Anti-human PlGF-2 Clone 3B10 mAb

Catalog No.	CMP109	**Quantity:**	100 µg

Alternate Names: PlGF; placental growth factor

Description: Human Placenta Growth Factor-2 (PlGF-2), a 22 kDa protein consisting of 152 amino acid residues is produced as a homodimer. PlGF is a polypeptide growth factor and a member of the plateletderived growth factor family but more related to vascular endothelial growth factor (VEGF). PlGF acts only as a weak mitogen for those cell types possessing receptors for binding (e.g. vascular endothelial cells). At least one high-affinity receptor for PlGF (FLT-1 or VEGFR1) has been demonstrated in different primary cell types (e.g. human umbilical vein endothelial cells and monocytes). In addition yo its action as a weak mitogen it is also a chemoattractant for monocytes and endothelial cells. Two different proteins are generated by differential splicing of the human PlGF gene: PlGF-1 (131 aa native chain) and PlGF-2 (152 aa native chain). Both mitogens are secretable proteins, but PlGF-2 can bind to heparin with high affinity. PlGF is apparently a homodimer, but preparations of PlGF show some heterogeneity on SDS gels depending of the varying degrees of glycosylation. All dimeric forms possess similar biological activities. If PlGF is angiogenic in vivo is not clear. However, heterodimers between VEGF and PlGF are mitogenic for endothelial cells and have strong angiogenic activity in vivo (e.g. in the CAM assay or in the cornea pocket assay). Different cells and tissues (e.g. placenta) express PlGF-1 and PlGF-2 at different rates. A much related protein of PlGF is VEGF with about 53% homology and VEGF-B with similar biological activities.

Gene ID: 5281

Specificity: Recognizes human PlGF

Host: Mouse

Immunogen: Recombinant human PlGF-2

Isotype: IgG1

Clone: 3B10

Formulation: Lyophilized from PBS, pH 7.4 without preservative

Purification: Protein G chromatography

Reconstitution: **Centrifuge vial prior to opening**. Add sterile distilled water to the vial to fully solubilize the antibody to a concentration of 1.0 mg/ml.

Applications: Western Blot: Use at 1-2 µg/ml

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Immunoprecipitation: Use at 1-2 µg/ml
Immunohistochemistry (Cryo sections)

The optimal concentration should be determined by the user for each specific application.

Storage & Stability: Store lyophilized antibody below 0°C. Reconstituted antibody is stable at 2-4°C for more than six months or aliquotted and stored frozen at -20°C for more than six months. **Avoid repeated freeze-thaw cycles**.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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